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Research Bulletin

Company Experience with Flexible Work Schedules

by Harriet Gorlin

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IT HAS BEEN CALLED flextime and flexitime in the United States and gleitende Arbeitzeit, l'horaire variable, l'horaire souple, flextid, l'orario flessible in various parts of Europe.[1] From its first use in Germany in 1967 to alleviate traffic congestion en route to an aerospace plant, it has spread quickly throughout most of Western Europe, and is now beginning to appear in the Soviet Union, Poland, Japan and Australia. In the United States, flexitime has attracted considerable attention among human resources managers, and about one firm in six uses it to some extent.

The promises by proponents of leaps in increased productivity and reduced absenteeism through the use of flexible hours have yet to be convincingly demonstrated; but companies with years of experience in such systems attest to their potential in reducing tardiness, improving workplace efficiency, decreasing overtime, and providing an advantage in recruiting. Furthermore, flexitime provides companies with the opportunity to offer their employees a nontaxable benefit. This opportunity to better the quality of life for employees without cost to them—and with little or no cost to the company—may be the strongest inducement of all. At a recent meeting of The Conference Board's council of human resources executives, a senior vice president of a large eastern insurance company was asked what benefits his company reaped from the substantial use of flexible work schedules. He answered simply: "It pleases our employees very much and doesn't get in the way of anything."

What It Is

Flexitime is a scheduling system that allows full-time employees to choose their own starting and quitting times, so long as each works the total number of regularly scheduled hours in a prescribed period. In effect, flexitime gives workers intervals of time during the day—before and after management-set "core" periods—when they are freely able to attend to personal matters without jeopardizing their jobs or working fewer hours. For some, it means easier commuting; for others, more time for family, school, a hobby, or even a second job. For still others, it removes the anxiety of being late if the alarm does not go off or the train is delayed.

Flexitime is not just the shifting of starting and quitting times. That practice, called staggered work hours, does not contain the element of personal choice that is the quintessential feature of flexitime.[2]

At the heart of the rationale behind flexible working hours is the assumption that, if human beings are given control (within limits) over their working hours, they will not only be able to satisfy their nonjob responsibilities and desires to a greater degree, but they will become better workers for it. Furthermore, it is argued that, to the extent that extra time during the day will answer the need, the opportunity to relieve a worker's outside pressures will go a long way toward contributing to that worker's job satisfaction.

Other underlying assumptions for flexitime include the following:

- Self-management, an internal control, is a more effective motivator than most external controls, such as financial incentives or lateness penalties.
- In an environment of trust, essential to any flexitime system, most people will meet their responsibilities rather than take advantage of situations like honor systems or nonsupervised periods.
- Given the opportunity and encouragement, most workers will find solutions to problems at work themselves whether these arise from flexible work schedules or otherwise.

Prevalence

A recent Conference Board survey of companies in five industry groups—manufacturing, insurance, banking, gas and electric utilities, and retailing—included questions on flexitime for three groups of employees—nonexempt blue-collar, and exempt and nonexempt white-collar workers.[3] (For a description of this survey see box.) Of the 570 responding companies, 16 percent overall reported some workers on a flexible work schedule. However, there were significant differences in prevalence, depending on industry, size of firm, and employee group.

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[1] "Flextime" is now the copyrighted brand name of a time-accumulating device manufactured by the Hecon Corporation.

[2] Staggered work hours were also devised to ease transportation problems, specifically for facilities in high density, urban locations. However, since much coordination and planning among employers and community transportation systems are required for effectiveness, it has proved difficult to implement, and interest in it has waned.

Insurance companies were the heaviest users of flexitime; 37 percent of the participating insurers included this practice. Manufacturers and banks were average for the group reporting programs, with 15 and 16 percent, respectively. In contrast to these industries, the incidence of flexitime for any group of employees at gas and electric utilities and retailers was negligible and does not warrant further analysis. (See Table 1.)

Table 2 indicates the prevalence of flexitime programs among the 330 responding manufacturers, arranged by two-digit Standard Industrial Classification (SIC). The total group of respondents contained too few companies in most of the classes to provide a reliable basis for comparison among types of manufacturers. Nevertheless, some observations may be made. Half of the petroleum refiners (SIC 29) provided flexible hours for their employees—in this case, white-collar workers only. Among manufacturers of professional and scientific instruments (SIC 38), better than a third reported programs for both blue- and white-collar employees. The largest SIC group of responding manufacturers, the producers of fabricated metals (SIC 34), reported a less-than-average number of companies (11 percent) offering flexitime.

Number of Employees

The number of employees was a definite factor in the prevalence of programs. Large firms—those with 1,000 or more employees in banks and 5,000 or more employees in manufacturing and insurance—were more likely to offer flexibility to their workers than smaller firms. Of the total responding firms, 9 percent of the small firms, 15 percent of the medium firms, and 26 percent of the large firms had programs. (See Table 3.) Within the industry groups, the same relationship to size was demonstrated. This may be due, in part, to the fact that the ability to schedule flexible hours while adequately maintaining work loads and services is easier where many workers perform similar, but independent, tasks—a situation found more readily in larger companies.

About the Survey

In the latter part of 1979, a questionnaire concerning flexible work schedules, among many other personnel practices, was mailed to a random sample of over 1,500 companies in five major industries—manufacturing, insurance, banking, gas and electric utilities, and retailing. There were 570 responses. The participants met the following criteria on minimum employment size: 200 employees for manufacturers and retailers, 100 employees for utilities and insurers, and 50 employees for banks. Information was elicited for three employee groups:

(1) Nonexempt nonoffice personnel, consisting of production, maintenance, warehousing and materials-handling workers in manufacturing; power plant, transmission and maintenance people in gas and electric utilities; and store personnel only—such as sales clerks, order clerks, stock clerks, check-out and wrapping clerks, and cashiers—in retail trade. This category was not applicable to banking and insurance companies.

(2) Nonexempt office personnel in clerical and technical jobs.

(3) Lower level exempt personnel in professional and technical positions, including first-line supervisors, floor managers, sales managers, and project managers.

Respondents were instructed to report practices at the locations affecting the largest number of each employee class, if they were multilocation employers.

Employee Group

Flexitime programs were almost exclusively provided for white-collar personnel, exempt and nonexempt. Only ten manufacturers reported any experience with flexible schedules for nonoffice or blue-collar workers. (See Table 1.)

Most of the flexible scheduling among survey companies occurred in nonunionized settings. In the total group of participating companies, it was largely the nonexempt, nonoffice workers in manufacturing, utilities and retailing who were unionized to any degree over 25 percent. It was also among these groups that flexitime was fairly low—3 percent of the manufacturers, none of the utilities, and one retailer. Since flexitime is pretty much a perquisite for white-collar workers, who are

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[3] Harriet Gorlin, *Personnel Practices II: Hours of Work, Pay Practices, Relocation.* The Conference Board, Information Bulletin No. 92, 1981.

Table 1: Companies with Flexitime Programs, by Industry Group

Industry	Total Respondents		Total Number of Companies with Programs		Number of Companies with Programs, by Employee Group: Nonexempt: Nonoffice[1]		Nonexempt: Office and Clerical		Lower level Exempt	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Manufacturing	330	100	49	15	10	3	48	15	40	12
Insurance	57	100	21	37	*	*	21	37	20	35
Banking	131	100	21	16	*	*	18	14	16	12
Gas and Electric Utilities	26	100	1	4	—	—	1	4	1	4
Retailing	26	100	2	8	1	4	2	8	—	—
Total	570	100	94	16	11	3	90	16	77	14

[1] The total number of respondents with nonexempt, nonoffice personnel was 382, as this category does not apply to insurance companies and banks. The percentages in that column are calculated on the lower base.

*Does not apply.

Table 2: Manufacturers with Flexitime Programs, by Standard Industrial Classification (SIC)

SIC	Industry	Total Respondents Number	Respondents with Flexitime Number	Respondents with Flexitime Percent
20	Food and kindred products	29	4	14
21	Tobacco	—	—	—
22	Textile mill products	5	—	—
23	Apparel	10	1	10
24	Lumber and wood products	4	—	—
25	Furniture and fixtures	5	1	20
26	Paper and allied products	18	2	11
27	Printing, publishing and allied products	18	2	11
28	Chemicals and allied products	21	4	19
29	Petroleum refining	14	7	50
30	Rubber products	13	—	—
31	Leather and leather products	4	1	25
32	Stone, clay and glass products	11	1	9
33	Primary metal industries	20	3	15
34	Fabricated metals	46	5	11
35	Machinery (not electrical)	23	3	13
36	Electrical machinery, equipment and supplies	36	4	11
37	Transportation equipment	12	1	8
38	Professional and scientific instruments	11	4	36
39	Miscellaneous manufacturing	30	6	20
	Total	330	49	15

Table 3: Size of Companies with Flexitime Programs, by Number of Employees

Company Size by Number of Employees[1]	Respondents by Industry: All Industries[2]: Total Respondents			Manufacturing: Total Respondents			Insurance: Total Respondents			Banking: Total Respondents		
		Flexitime Companies			Flexitime Companies			Flexitime Companies			Flexitime Companies	
	No.	No.	%	No.	No.	%	No.	No.	%	No.	No.	%
Small	198	17	9	98	5	5	28	7	25	59	4	7
Medium	182	28	15	115	17	15	13	5	38	32	5	16
Large	190	49	26	117	27	23	16	9	56	40	12	30

[1] Size-of-company categories were determined by the following limits:

Small: Banks—less than 500; other industries—less than 1,000
Medium: Banks—500 to 999; other industries—1,000 to 4,999
Large: Banks—1,000 and over; other industries—5,000 and over

[2] Includes gas and electric utilities and retailers

Table 4: Percentage of Employees Scheduled in Flexitime Programs

	Percentage of Respondents by Employee Group[1]									
	All Industries			Manufacturing			Insurance		Banking	
Percentage of	NO	OC	LL	NO	OC	LL	OC	LL	OC	LL
Employees Scheduled	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Less than 5%	—	23	18	—	19	12	6	12	50	40
5% — 24%	44	29	34	50	33	38	12	12	31	47
25% — 49%	11	5	6	13	5	3	12	12	—	7
50% — 99%	22	19	16	13	21	21	18	18	19	7
100%	22	24	25	25	23	26	53	47	—	—
Total[2]	100	100	100	100	100	100	100	100	100	100

[1] The following code was used to designate employee groups:

NO — Nonexempt nonoffice (production, operations, sales)
OC — Nonexempt office and clerical
LL — Lower level exempt

[2] Totals may not add up to 100 percent due to rounding.

largely unorganized, the data are inconclusive regarding the effect of unionization upon flexible scheduling programs.

Normal Work Schedules

The normal workdays and workweeks reported by the companies with flexible schedules closely paralleled the distribution of such patterns in the whole sample. Ninety-six to 100 percent of all respondents reported operating normally on a five-day week. Flexitime companies also almost unanimously reported normal workweeks of five days. The hours in a normal workday or workweek varied by industry and employee group; and here, too, the patterns in the companies with flexitime were quite similar to the overall sample.

Number of Workers Scheduled

The data regarding the percentage of employees on flexitime yield some measure of company commitment to the practice at the time of the survey. Insurance companies had the largest number of employees so scheduled, with half the companies reporting 100 percent of the two specified employee groups on flexitime. In half of the manufacturers with programs, less than 25 percent of employees were involved; but a quarter of the manufacturers with programs reported 100 percent on flexitime. About half of the banks provided programs for less than 5 percent of their staff, and none reported 100 percent on flexitime. (See Table 4.)

The May, 1980 supplement to the monthly *Current Population Survey*, conducted by the United States Bureau of the Census for the Bureau of Labor Statistics, included questions on flexible schedules for the first time. It was reported that 11.9 percent of the work force—7.6 million workers out of 64.4 million at work during the survey week—were on "flexitime or some other schedule that allows workers to vary the time they begin and end work." These included administrators, sales workers, and transport equipment operatives for whom time schedules have traditionally been informal and flexible arrangements. In addition, as it was defined, this figure includes workers on alternative work schedules other than flexitime.[4]

Very high figures are cited for the percentage of workers on flexitime in Western Europe. Oft-quoted figures run as high as 40 percent of the work force in Switzerland, 30 percent in West Germany, and 10 percent in France. These figures are generally estimated and rarely documented, but indications are that the practice is not just a fad in Europe.[5] Conditions and influences regarding labor on the continent are highly conducive to programs that increase worker control. European workers already have a high level of experience with participative management plans. Quality-of-work-life issues have attracted enough attention to have gained legislative support in many countries. This is an environment favorable to self-managed working hours, and there are indications for ever wider experimentation and use of flexible scheduling in Western Europe.

In the United States, the demographic shifts in the work force from 1970 to 1980 lead one to expect that flexitime will increase in the near future simply because it enables more women to enter the work force. Women now constitute almost half of the U.S. work force. In addition to the rising number of households headed and supported by women, about 50 percent of wives work.

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[4] *News.* Washington, D. C.: United States Department of Labor, February 24, 1981.

[5] Bernhard Keppler, "European Industries." In D. Robison, *Alternative Work Patterns.* New York: Work in America Institute, 1976.

Legislation Affecting Flexitime Programs[7]

The Fair Labor Standards Act of 1938 (FLSA) and its amendments mandate the payment of a minimum wage for a maximum of 40 hours a week. This applies to more workers in the private and public sectors than any other law regulating wages and hours. All workers under its coverage must receive a time-and-a-half rate for work in excess of 40 hours in a week. Private-sector workers engaged in interstate commerce by employers doing a gross annual business over $362,500 are covered.

Executive, administrative and professional personnel, who earn more than a specified minimum salary, are exempted from coverage. Most field salespeople are also exempted. Certain industries are excluded from FLSA, but are regulated by other federal laws. These industries, for the most part, are related to transportation, and their employees may be free of maximum-hour restrictions.

Federal employees are further covered by Title 5 of the United States Code. They are required to be paid an overtime premium for work over eight hours in a day *and* over forty hours in a week. The recent experiment in flexitime was made possible by special limited legislation passed in 1978.

FLSA provisions do not extend to state and local government employees. Each of these entities regulates its work force by its own statutes. However, state and local codes may impose further restrictions on wages and hours for privately employed workers in their jurisdictions, thereby further limiting flexible scheduling.

Other legislation affecting private-sector employees and flexible working hour plans include the following:

- The Walsh-Healy Act requires the payment of overtime wage rates for work over forty hours a week or eight hours a day for workers involved in government-contract work (with certain exclusions).

- The Davis-Bacon Act regulates wages and hours in companies engaged in public construction.

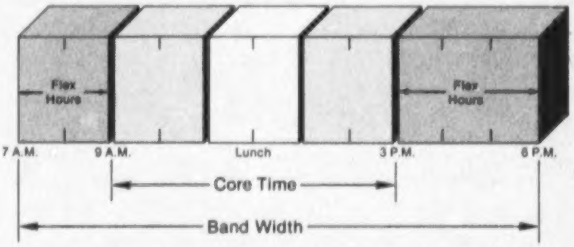
- The Contract Work Hours Act provides companies in contract with labor unions an annual or semiannual period in which to satisfy the maximum number of hours to be worked. The semiannual contract limits the hours that may be worked in a 26-week period to 1,040, and requires an overtime premium for work over 12 hours a day or 56 hours a week. Under the annual contract stipulations, a minimum of 1,840 hours, or 46 weeks' work, is guaranteed; the maximum number of hours that may be worked in a year is 2,250; and overtime premiums are to be applied to work over the minimum 1,840 hours during the year. The possibilities for flexible working schedules under these conditions are vast, including a flexible month or a flexible year.

Flexible working hours are especially effective in attracting women.

Since flexitime was first introduced into the U.S. workplace in 1971, there are only a handful of companies with ten years of experience today—SmithKline Corporation, Berol Corporation, Control Data Corporation, Prudential Insurance Company, Hewlett-Packard Company. In spite of legislative restrictions and constraints imposed by organized labor, the practice continues to grow, and interest in it is quite lively at present. (See box for legislation affecting flexitime programs.) The United States Office of Personnel Management, since September, 1978, has conducted what may be the largest experiment of flexible and compressed work schedules to date in this country. It involves 1,500 organizations and 325,000 government employees.[6]

Flexitime Patterns

A typical flexitime pattern for a unit in which employees normally work a five-day, forty-hour week from 8 a.m. to 5 p.m. daily may look like this:



The core time, when all employees must be at work, includes the one-hour lunch break, which may be the same for everyone or taken within one and a half or two hours by a half or a third of the staff at a time. The band width, the total number of hours during which the facility is operational, is 11 hours. Two hours in the morning and three hours in the evening are flexible time.

Obviously, there can be endless variations on this theme. A split core may be designated from 9 a.m. to noon and from 2 to 4 p.m., with an additional flexible period in midday to include a mandatory lunch period of at least half an hour. Starting time may be earlier, quitting time later or earlier. Core time may also vary considerably in length and time of day. The nature of the work, the degree of dependence of the staff on mass transportation, and the needs and wishes of the workers are the main factors that determine the shape of the schedule.

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[6] For a description of the Master Plan for the Alternative Work Schedules Experimental Program, see the *Federal Register*, Washington, D. C.: General Services Administration, July 20, 1979, pp. 42661 — 42668.

[7] For a fuller treatment of this subject see Gerald Schilian, "Legal and Contractual Considerations," chapter 18 in Simcha Ronen, *Flexible Working Hours*, New York: McGraw-Hill, 1981.

Some systems offer employees the freedom to vary arrival and departure times each day, so long as they fulfill the total number of hours for the prescribed period. This is considered a "total flex" system. A "modified flex" requires that employees maintain the schedules they choose for one week or some longer period. This constraint, while simplifying scheduling problems, may limit the effectiveness of flexitime in reducing lateness or absenteeism.

Another element that shapes this new worktime structure is the prescribed period, sometimes called the "settlement period," in which the full-time hourly schedule must be completed. It may or may not coincide with the pay period. It may be the 8-hour day, the 40-, 38½- or 37-hour week, the 70-hour biweekly period, the 160-hour month, or any interval within government regulations or contractual agreement. For nonexempt workers, this period is essentially restricted to the number of hours that may be worked at a straight-time rate in one stretch of time. Most flexitime systems are restricted to prescribed periods of eight hours because of state laws or contract requirements. (See box on page 7.)

In those plans not limited to the eight-hour day, or in facilities where the normal working day is less than eight hours, employees may gain additional flexibility by being allowed to "bank" hours in a debit and credit account. Most organizations offering this carry-over feature restrict it to flex-hour bands, so that time cannot be taken off during core hours.

Applicability

Some organizations use a variety of flexitime patterns within one facility. An office that does much of its business with contacts in other time zones may schedule core time accordingly, while an office that serves the local public will have another scheduled core period. Merchandise delivery drops, local banking hours, stock exchange hours, can all affect the flexibility of the facility or department. In the experience of organizations that have attempted flexible work schedules in various settings, applicability is limited, difficult or contraindicated in some operations. The following are examples of such situations:

- Assembly-line production or other continuous-process environments that must shut down when one station cannot be attended;
- Multishift operations, where scheduling for flexibility is very tricky because of overlapping shifts;
- Service-on-demand situations, where the availability of staff to respond to outside clients or suppliers is critical;
- Situations requiring high task-interdependence, where work flow can only be maintained by constant and meticulous planning;
- On-the-job training assignments, or other situations requiring continuous supervision.

It would, however, seem that the ability to surmount obstacles in scheduling is equal to the desire. For example, there is a printing firm in New Jersey that operates round the clock and employs people on a variety of schedules—three twelve-hour days a week, seven and a half-hour shifts from Monday to Friday starting at any hour (day or night) at the employee's choice, three-week months of ten-hour days, to name a few—even 9 to 5 o'clock, five days a week.

Units with high potential for maximum use of flexitime are those in which tasks are accomplished on an independent basis and where a minimum of supervision is required. For instance, batch processors of computerized data, operating independently with the use of an on-line terminal, have adapted well to flexitime.

Organizational Requirements

According to those who have had the experience, the development of a successful system may require some serious changes in organizational style and procedures. They consider a first-order priority to be the formulation of clear objectives for the program in terms of the unit for which it is proposed. These objectives must be reasonable, appropriate and attainable—the reduction of absenteeism, an increase in output, the elimination of lateness, or improved phone coverage during certain hours, to name a few. It is urged that the objectives be communicated to all employees who may participate in the plan, so that they understand what they will be trying to achieve, how results will be measured, and what failure to achieve these objectives will mean.

The importance of avowed support for the program by all levels of management, from the immediate supervisor to the chief operating officer of the facility, is also cited. In some cases, the presentation of the program to the participating unit is made by a high-level officer to reinforce this support. At the same time, flexitime companies find that it is advisable, if there is a union, to include representatives in the early stages of planning and implementation.

In addition to preparing the employees with educational and descriptive materials on the plan, many firms make training opportunities available at all levels for more effective operation under the new conditions. Such training might include techniques in group dynamics, practice in time planning for task accomplishment, and the teaching of replacement task skills. Much depends, they say, on how task oriented employees can become, and how smoothly they can interact with one another to maintain the integrity of their unit. Furthermore, this training is carried out on a continuing and sustaining basis. Companies find that reinforcement of new work habits and attitudes is constantly needed. The enthusiasm of the workers flags, they find, if the commitment of management is not actively demonstrated. Companies also stress that the need for such communication and training is just as essential for the effectiveness of supervisors in the program as it is for other employees.

According to advocates of flexitime, the organization that achieves these goals to any substantial degree may have gained more than a workable system. It may, in fact, have taken a large step toward becoming a workplace capable of many other innovations and productivity-improvement measures. However, they warn, if flexitime is offered in an organizational climate that is incongruent with flexibility, that is rigid or hierarchical in all other ways, then the message to employees may be misleading and may, in the end, lower morale when higher expectations are not met.

Scheduling

Scheduling is the key to any flexible working arrangement. The burden of "choreographing" personnel who arrive and depart at almost all hours, meeting production goals or deadlines in a shifting workday, arranging general meetings and consultations in a compressed time frame, carrying out the additional training of workers in replacement task skills, and generally attempting to supervise operations over an expanded day greatly encumbers the manager's job. It is not surprising that companies report some resistance to programs from supervisors. The absence of one person in a small unit or facility may further intensify the problems of scheduling. The absence of two people may spell disaster. Companies reportedly focus on performance and task completion rather than on time at work in reorienting their employees for flexitime. However, the danger exists that the difficulties encountered in scheduling and making up time may actually increase the concentration on time, and overshadow the whole work environment. According to companies with experience, efficient work-planning skills and a spirit of cooperation on the parts of both managers and staff can overcome most problems.

Costs

While flexitime systems do not require large investments of capital, there are costs involved, which will vary in each organization. Start-up costs may include the formation of a steering committee, or some such body, to gather information on other companies' experience, to assess time considerations within the company, to survey employees, and to draft a proposal for a pilot study. The pilot study will entail further administrative costs in implementation, monitoring and evaluation. A second attitude survey is often taken at this point. The acquisition of time-recording or time-accumulating equipment is optional. Many companies prefer the honor system, at least for the pilot study.

The cost of orientation and training will be harder to determine because it will be ongoing. Energy costs may increase because of the lighting, heating or cooling required for the additional hours in the extended day. Increased personnel (perhaps working only part-time) may be needed to provide security, cafeteria, health unit, elevator and switchboard services for the extra hours. It was reported, however, that employees in locations not serviced by switchboards beyond the normal workday greatly appreciated the quiet periods very early or very late, which allowed concentrated, uninterrupted work. It may be that companies do not know what their actual costs for flexitime are, or perhaps it is that their benefits, however perceived and measured, are deemed cost-effective; but, on the whole, companies do not cite costs as a deterrent factor.

Lateness, Absenteeism and Turnover

Since the system is designed to free employees from the tyranny of rigid time schedules, "lateness" is virtually eliminated by most plans. Even if workers are held to a fixed schedule of their own choosing for a specific length of time, leeway of up to a half hour on arriving is generally given, since it can be made up at quitting time. Those unable to comply within these limits are able to select a more suitable schedule. Only people arriving during core time are considered "late." Flexitime will not shelter or improve chronic offenders or incorrigibles, but it can be a great comfort for those with temporary problems or occasional lapses. Flexitime "watchers" feel that, more than anything, it preserves the dignity of employees who do not have to make excuses or reveal personal situations to their bosses or co-workers.

Declines in turnover and absenteeism do not equal the dramatic decrease in lateness. Not all absences are due to appointments, personal errands, or the unwillingness to come in late. Those that are should decrease because of the opportunities of flexibility; but chronic absenteeism, like chronic lateness, will not be affected by any arrangement of time. Of course, absence for illness cannot be expected to change in any case.

Turnover is not always due to dissatisfaction with working hours. Some decline was observed as those with heavy nonjob responsibilities found accommodation in flexitime, but reports from U.S. firms were generally inconclusive regarding turnover. However, some early experiences in Western Europe indicated sharp reductions in turnover due to flexitime programs.

Pros and Cons

Companies report many advantages of flexitime, but each is qualified in some manner. The following by no means exhausts the paradoxes:

- *Recruitment and retention:* As long as flexitime is not widely offered, it provides an added inducement in recruiting and retaining workers, especially women with children. As more organizations adopt it, this advantage diminishes.
- *Work readiness:* Employers have reported quicker starts in the morning, due either to the avoidance of the rush hour or to the fact that co-workers are already working when the employee arrives. However, the very earliest or latest hours are sometimes abused because they are not supervised.
- *Overtime:* Employers report a decreased need to schedule overtime. The extended day may, indeed, be a better fit for the company's work cycle. One manufacturer observed that employees voluntarily scheduled their time to meet peak loads. If such efforts are not rewarded, flexitime may be viewed as a speed up. On the other hand, many workers resist the system because they depend on overtime pay.
- *Time off:* The decrease in company time off for personal chores or medical appointments constitutes a real savings for the company, but may be regarded by some employees as a loss of a benefit. Firms have also had to face the problem of how to handle personal time off for people in the organization who do not choose flexitime, leading to great confusion over any excused time off, unless very specific policies have been written to cover most emergencies.
- *Skills:* The increased versatility that some workers gain in firms that offer opportunities to learn additional skills and job procedures for fill-in purposes during flex hours often provides these workers with new challenges and improved promotability. But, in many cases where organized labor was involved, objection was made to a system requiring workers to fill in for others. Even in nonunion situations, pay rates may differ between the worker and his or her flex-hour replacement. The result may be increased grievances and noncooperation.
- *Worker morale:* Almost all companies report improvements in morale and team spirit among workers on flexitime, but also discover deep resentment among units or branches that were either not selected for participation or were offered a more restricted plan.

Productivity

It is difficult to accept the reports of increased productivity due only to flexible working hours. Productivity is a variously defined concept, measured in a variety of ways. Individual company measurements of productivity are generally not comparable and perceived degrees of productivity improvement from attitude surveys or management "guesstimates" are even less reliable as an index. But behavioral scientists have been ever more effective in convincing human resources people that increased control over one's working life, reduced pressure from time constraints, a more open and participative climate in the workplace, and work that is better organized will lead to more productive workers.

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Oil Shocks and Economic Adjustment

The Experience of the Industrial Countries

by John Hein
Director, International Economics

The Conference Board

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IN THE FALL OF 1981, *Euromoney* magazine featured a cover story on how the economies of the noncommunist world had performed since 1973.[1] On the basis of five measures—real growth, inflation, strength of currency, balance of payments, and exports—that together were assumed to "reflect the economic welfare of each economy," the article came up with a ranking of 85 countries for the 1974-1981 period. Not surprisingly, the list was led by three of the so-called newly industrialized countries (NIC's)—Taiwan, Singapore and Hong Kong. The top ten were:

1. Taiwan
2. Singapore
3. Hong Kong
4. Saudi Arabia
5. Malaysia
6. Iraq
7. Egypt
8. Thailand
9. Cyprus
10. Japan

Two general conclusions emerged from the exercise: (1) structurally similar economies—for instance, Mexico and Algeria or Germany and Austria—produced fairly similar scores; and (2) some countries did remarkably better than others that were similarly endowed. In other words, even economies that showed largely similar characteristics to start with and were subject to the same outside influences registered different degrees of economic growth. Such differences, the article stressed, did serve to reveal the importance of national policies in shaping a country's economic performance or, simply, that "domestic policies were responsible for much of the difference."

The importance of domestic policies in shaping economic performance was nowhere more evident than in the reactions of the major industrial countries to the two oil price increases imposed by OPEC in 1973-1974 and in 1979-1980—roughly the same time span covered by *Euromoney's* list. Although differing in absolute amounts, the events that triggered these policy responses were largely similar in nature—namely, a quadrupling and a more than doubling of world oil prices, respectively. But the policies adopted by the industrial countries on the two occasions and the actual results of those policies were sufficiently dissimilar to merit further analysis and exploration.

Obviously, a broad-gauged approach of this kind encounters various hazards and limitations. Countries differ greatly in institutions, markets and policymaking mechanisms so that analysis of a number of countries at once makes treatment of any one of them necessarily superficial. Moreover, an overall approach risks ignoring aspects that are particular to a given country. This report is not intended to convey detailed information on how individual countries acted, but rather to portray how the major industrial countries as a group performed following the two oil shocks.

The Mechanics of Oil Price Increases

Oil price increases have two immediate effects on the economies of oil-importing countries—they reduce growth and worsen inflation. Higher prices for imported oil raise the cost of petroleum products directly and, at the same time, increase the cost of goods and services using oil in their production. This is equivalent to a rise in excise taxes on the affected products and, therefore, consumers suffer a loss of real income. Such a "tax increase" cannot be offset by an increase in money wages, except temporarily, since an increase in wages will lead to a rise in other prices and thus cannot restore real incomes.

In the longer run, of course, the loss in real incomes resulting from the OPEC "tax" need not affect overall demand. To the extent that OPEC's oil revenues are spent on purchases of goods and services in the oil-importing countries (taken as a group), aggregate demand may remain unaffected. This is in fact what happened in 1978 when OPEC imported sufficient goods and services from the industrial countries to offset that year's "tax" in full, and the OPEC surplus virtually disappeared.

In the short run, however, OPEC spending will not increase as rapidly as receipts. This is especially true for the so-called "low absorbers" among the oil producers—countries such as Saudi Arabia and Kuwait that have relatively small populations and hence are unable to respend their oil revenues immediately.

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[1] "The World's Best Economies," *Euromoney*, October, 1981.

Among the oil-importing countries, the most immediate and perhaps the most logical reaction to higher oil prices consisted in letting the balance on current account deteriorate, that is, in letting a surplus drop sharply or even turn into a deficit. Germany furnishes the most obvious example of such a development: Its oil imports rose from 1.5 percent of gross national product in 1972 to 5.5 percent in 1981, while the current balance deteriorated from +0.5 percent to -2.0 percent of GNP between those two years.

However, such a deterioration in the balance of payments constitutes a passive accommodation rather than a conscious policy reaction to higher oil prices. There are actually three major ways in which oil-importing countries can react in their economic policies to the "oil tax." (1) They can adopt more expansionary monetary and fiscal policies to offset the drain of that tax on domestic demand, that is, fill the gap in demand by credit expansion and increased deficit spending; (2) they can keep domestic policies unchanged and let the higher oil price exert a dampening effect on domestic demand, with a resulting drop in domestic economic activity; or (3) they can shift their monetary and fiscal policies in the direction of greater restraint. Such action reinforces the deflationary effect of the higher oil price on domestic output but also tends to dampen domestic inflationary pressures.

In general, the response to the 1973-1974 price hike fell into the second category, although some countries, such as the United Kingdom, opted for the first kind of policy action in attempting to compensate for the new OPEC "tax." In 1979-1980, policy response was predominantly of the third kind, as the fight against inflation was given the highest priority.

1973-1974 versus 1979-1980: Some Comparisons

Just as in 1973-1974 (also referred to as "OPEC I"), the steep upward adjustment of the price of oil in 1979-1980 (or "OPEC II"), combined with a simultaneous increase in the prices of major nonoil commodities, generated strong inflationary impulses in the industrial countries. In actual percentage terms, the OPEC II price hike—from $13 to $31 a barrel—looks less severe than that of OPEC I. But such a comparison is misleading because of the relatively low level—about $2.80 per barrel—from which oil prices took off in 1973-1974.

In aggregate economic terms, the increase in the oil import bill of the major industrial countries relative to domestic economic activity was roughly equal in both periods. Although the industrial countries imported some 10 percent less oil (in volume terms) in 1980 than in 1978, the sharp price increase forced them to pay out an extra $150 billion, equivalent to about 2 percent of their combined national incomes. And since the bulk of that amount ended up as addition to the 'petrodollars' accumulated by the OPEC countries—their 1980 current-account surplus reached some $112 billion—the importing countries suffered a deficit (and a deflationary shock) of roughly that magnitude.

However, although the economic impacts of OPEC I and OPEC II were comparable, the actual rise in the prices of oil and of nonoil commodities was somewhat more gradual the second time around. At the same time, the policy reactions of the major countries were more determinedly anti-inflationary. Following OPEC I, some countries had moved to offset the "oil tax"—of some $68 billion in 1974—by expansionary measures at home. These, in turn, resulted in increased budget and balance-of-payments deficits and, often, serious inflationary pressures. In the wake of OPEC II, attempts were, therefore, made to limit the overall inflationary consequences and to encourage the appropriate cost-price relationships.

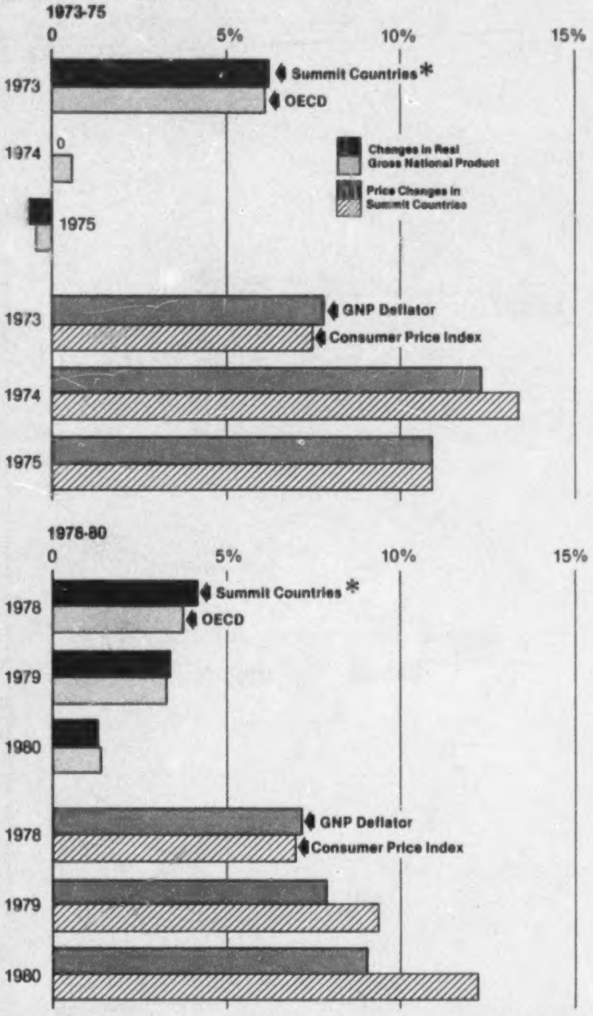
Overall, inflation was somewhat lower in 1979-1980 than in the two years following OPEC I. In 11 major industrial countries as a group, consumer prices rose by about 24 percent during the earlier period as against 20.5 percent during the later one. The concentration of those price rises also differed. During OPEC I, prices soared during the first 12 months of the oil shock, while in 1979-1980 their acceleration was considerably smoother and more protracted.

One favorable factor was that many countries entered the OPEC II period with sharply lower inflation rates than had prevailed at the time of OPEC I. In one group of countries, for instance—including Germany, Japan, Belgium, the Netherlands, and Switzerland—strong policy measures cut inflation rates in half between 1973 and 1975 (from a range of about 7-19 percent to one between 3.5 and 11 percent). During OPEC II, inflation rates among that group rose from 0.5 to 4.0 percent in 1978 to only 4.5 to 7.5 percent in 1980.

Another notable contrast between the two episodes is that the slowing of economic activity in the industrial countries was somewhat less severe the second time around. One reason for this development is that business activity in the major countries was somewhat less synchronized than just prior to the 1975 recession, when most of the industrial countries had reached the end of the recovery phase simultaneously. Thus, in contrast to the United States, where real gross national product fell by 0.2 percent in 1980, Germany and Japan registered GNP growth rates of 1.8 and 4.2 percent, respectively. This decidedly uneven performance resulted in a 1980 growth rate of 1.2 percent for the seven summit countries as a group, which contrasted sharply with zero growth in 1974-1975 (see Chart 1).

This marked contrast between the two episodes has not gone unnoticed. As one author has observed: "The difference in the international mood following the first oil shock in 1974 and the second in 1979

Chart 1: Growth and Inflation, 1973-75 and 1978-80



* United States, Canada, Japan, France, Germany, Italy and United Kingdom

Source: Organization for Economic Cooperation and Development

was. . .striking."[2] As domestic demand and incomes were squeezed for the second time in less than a decade by higher energy prices, the authorities of the industrial countries made no serious attempt to coordinate their policy reactions in order to avert an economic downturn. The most important factor, Shonfield surmises, was that in the intervening five years they had had the rather novel experience of sustained high rates of inflation associated with relatively low levels of economic activity. This "made them nervous about policies which deliberately aimed to give a boost, however temporary, to domestic demand."

In fact, one striking aspect of OPEC II is that the second rise in oil prices was permitted to feed through the system much more rapidly than during OPEC I, when a number of countries had attempted to suppress or postpone the inevitable inflationary consequences. During OPEC II, by contrast, most countries allowed domestic energy prices to increase, so as to reduce dependence on imported energy. Thus, the United States abolished the remaining price controls on domestically produced oil; Belgium adopted special energy-use taxes; and France and Italy introduced sharply higher public-utility charges.

It is essential to realize, however, that only part of the inflation rates experienced by individual countries following the two oil price shocks (and the simultaneous runup in raw material prices) was of external or international origin. Such a distinction between "imported" and "domestically produced" inflation cannot be exact, of course—largely because of the interlinkages and feedbacks between domestic and international costs and prices. To the extent that such a distinction can usefully be made, however, some interesting conclusions emerge.

During 1979-1980, the imported inflation element was stronger in a number of countries than it had been in 1973-1974. These included Italy, Japan and Switzerland, and to a lesser extent Germany and the United States (see Chart 2). Conversely, the domestic inflation component was considerably smaller in most countries in the second period than in the first. In Japan, the domestic element even slowed, despite the country's large dependence on imported energy. In Italy and the United States, on the other hand, domestic inflation rose by as much over the two-year span 1979 to 1980 as it had in 1974-1975.

Exchange Rates and Domestic Inflation

Exchange rates have played another crucial role in recent adjustment efforts through the degree to which import prices came to affect domestic inflation. Thus, in late 1973 and in 1974 actual or "natural" import-price increases were magnified in France, Japan and the United Kingdom by the depreciation of those countries' exchange rates. For Canada, Germany and the United States, by contrast, the rise in import prices was dampened to some extent by the appreciation of the two dollars and the German mark.

In the interval between the two oil shocks, diverging exchange-rate movements contributed to marked differences in the way that external price developments were transmitted to national economies. Those movements included the decline of the U.S. dollar from late 1977 on; the appreciation of the yen between 1976 and 1978; the 1975-1976 sterling crisis; the D-mark appreciation

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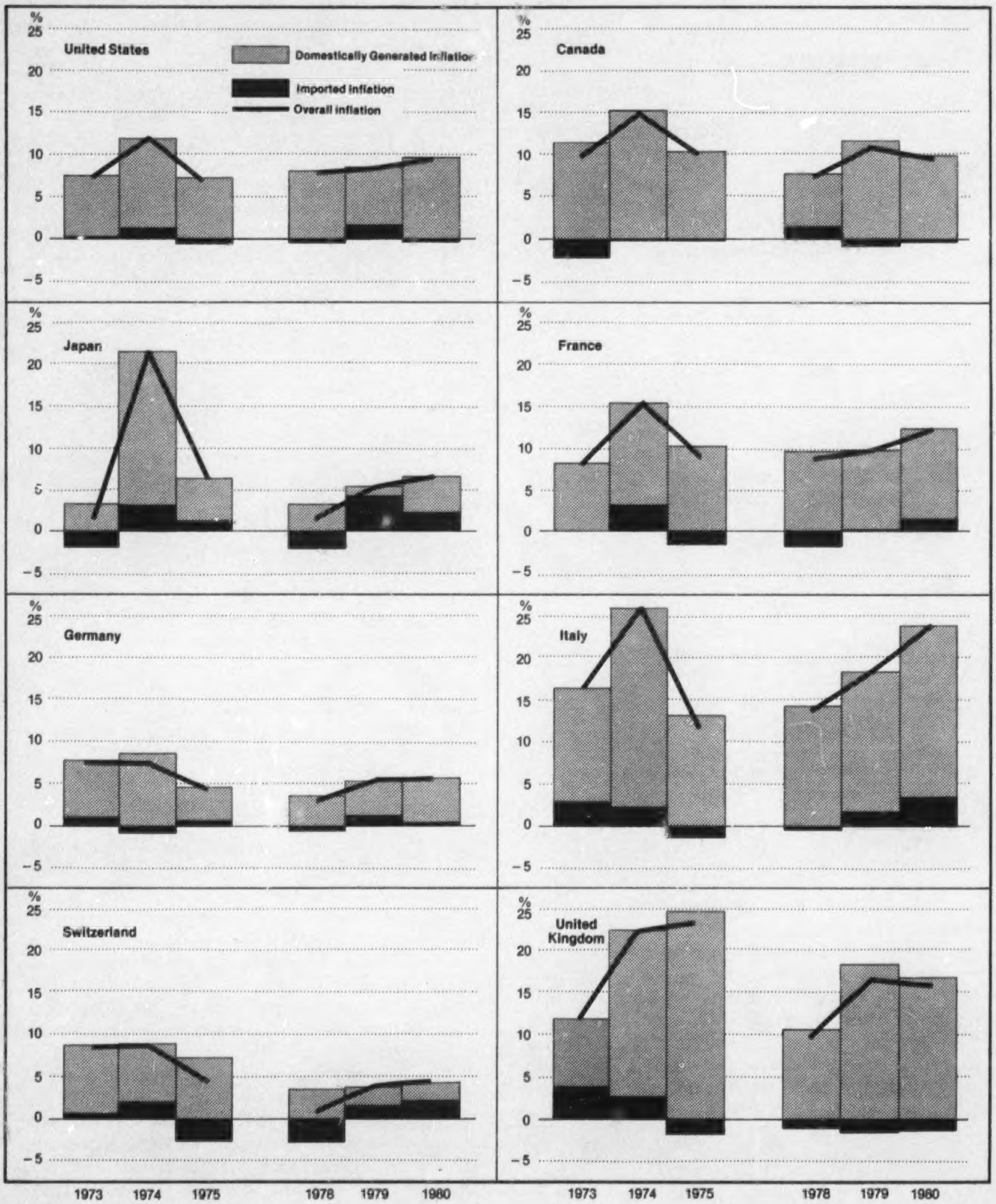
[2] Andrew Shonfield, "The World Economy 1979," America and the World, 1979. *Foreign Affairs*, (Special Issue, Vol. 58. No. 3) p. 607

Chart 2: Components of Inflation, 1973-75 and 1978-80 (annual change in percent)



Source: Bank for International Settlements

between 1976 and 1979; the depreciation of the French franc upon that currency's withdrawal from the European "snake"; and the decline in the Canadian dollar in 1977-1978.

During the second oil price episode, the influence of exchange rates on domestic price movements proved drastically different. In Japan, the 1979 depreciation of the yen made the second oil price increase at least as burdensome, if not more so, than the earlier shock. In the United Kingdom, on the other hand, the sharp appreciation of sterling moderated the external price impact. And France and Germany benefited for a time from appreciating exchange rates.

If we look especially at the price of oil—which is denominated in dollars—the cost of imported oil to a given country will depend both on the world price and on that country's exchange rate against the dollar. Consequently, countries whose currencies appreciated sharply against the dollar in the mid- and late 1970's experienced much smaller oil-push effects on prices and costs than the United States. In certain years, some countries even enjoyed absolute price decreases in domestic-currency terms.

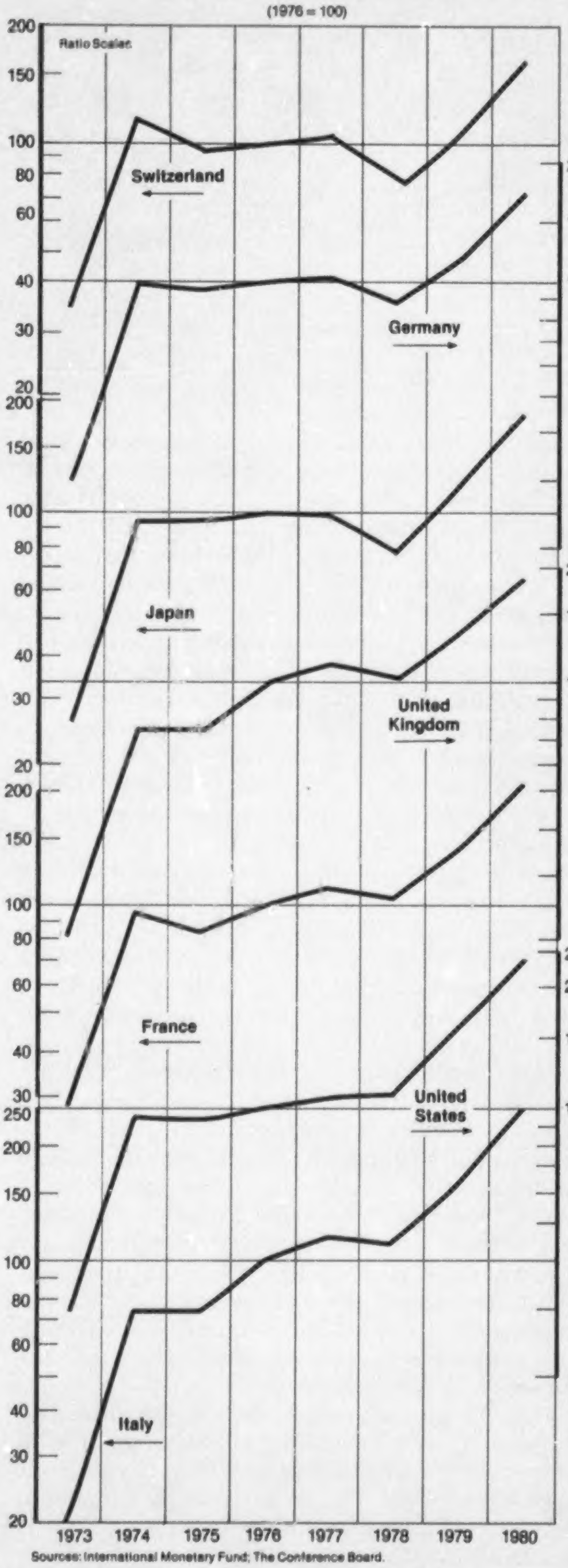
Chart 3 provides data on such cost changes for seven major countries, with the domestic price of oil derived from the world price and the annual average exchange rate against the dollar. While the experience for all seven countries was broadly similar between 1973 and 1974, it began to diverge, often markedly, in subsequent years. Thus, Switzerland enjoyed an absolute decrease in the price of oil between 1974 and 1976 of approximately 12 percent, while the United Kingdom registered an increase of about one-third over the same period. Both Germany and Switzerland benefited from large price decreases between 1976 and 1978.

The stimuli to cost and wage increases arising from the general oil-price hike varied widely, therefore, among countries. In fact, a ranking of major countries by their 1975-1978 inflation rates as compared to their 1970-1973 inflation rates produces an almost perfect correlation with a ranking of those same countries by changes in the domestic price of imported oil (see Table 1). Changes in the domestic cost of imported oil thus provide an important, if partial, explanation of variations in national inflation rates.

Adjusting to OPEC II

The considerably smoother economic adjustment to OPEC II still lacks a full interpretation. The 1981 Report of the Council of Economic Advisers argued that it was not possible "to provide a definitive explanation of why the oil-price rise was absorbed more easily during the current cycle than it was in 1974-75," but then suggested that timing certainly was one of the more important considerations (p. 189).

Chart 3: Domestic Currency Cost of Imported Oil



Sources: International Monetary Fund; The Conference Board.

Table 1: Inflation Rates and Oil Prices

	Ratio of 1975-1978 to 1970-1973 Inflation	*Change in Oil Import Price, 1974-1978*
	(in percent)	
Italy	+2.4	+49.3
United Kingdom	+2.0	+39.2
France	+1.6	+ 7.3
United States	+1.5	+14.6
Japan	+1.1	−18.1
Germany	+0.8	−12.2
Switzerland	+0.4	−31.6

Sources: H. Peter Gray, "Oil-Push Inflation: A Broader Examination," Banca Nazionale del Lavoro, *Quarterly Review*, March 1981; The Conference Board.

The 1979-1980 runup in oil prices came at a time when most countries were still on an upswing from the previous recession. Thus, in this episode cyclical factors to some extent tended to offset, rather than accentuate, the oil-price shock. Moreover, OPEC I had followed hard on the heels of a major surge in industrial and agricultural commodity prices, leading to strong speculative pressures and excessive inventory accumulation; the second commodity price surge was much less severe. But it has also been argued that the governments of the major industrial countries were about to apply the brakes to economic activity, even before the 1979-1980 oil-price increase became fully effective. The underlying strength of world economic recovery alone would have justified such action.

But subsequently other concerns also seem to have played a role in nudging national authorities toward a more restrictive policy stance. There was, first, the possibility that the 1980 recession in the United States might deepen and, second, that it would coincide with a drop in economic activity elsewhere (especially in the United Kingdom).

In addition, there was the distinct possibility, if not certainty, that the OPEC countries would not be in a position to act the way they had the first time around, when an unrestrained buying spree had quickly eaten into their accumulated oil revenues. Given that some of OPEC's "low absorbers" had completed the initial stages of large, long-range development programs, the prospect was for much larger OPEC surpluses to accumulate. (A related concern was how far, in the wake of the U.S.-Iranian dispute, the owners of the oil funds would be willing to continue entrusting them to the same financial mechanism as before.)

Finally, it is generally felt that a major ingredient in the much smoother economic adjustment following OPEC II was the more restrained response by wage earners in the face of rising prices. This greater restraint contributed toward preserving a relationship between costs and prices that did not impair profitability and, hence, did not inhibit further investment. But it also limited the rise in underlying inflation rates and thus helped reduce the probable duration and severity of the policy-restraint measures needed to deal with the oil price increase itself. In fact, the virtually unanimous (and certainly unambiguous) adoption in most countries of a restraint policy and the rejection of measures that would have financed the oil-price increase had important psychological repercussions on wage negotiations.

In fact, as the Council of Economic Advisers observed in its 1981 report: "In some countries—especially those where the oil-price shock has been absorbed most rapidly, such as Germany and Japan—wage moderation may reflect an implicit social consensus under which unavoidable reductions in real incomes are accepted by wage earners in the understanding that the distribution of income will not thereby be shifted to their disadvantage" (p. 190).

Perhaps the fact that stands out most clearly in comparing the two episodes is that the private sector did not pull in its horns after OPEC II the way it had earlier in the decade. As a result, total demand and output in the industrial countries did not plummet the way they had the first time.

Two major developments can be noted here. First, the more moderate behavior of wages in response to OPEC II permitted business investment to remain fairly strong in a number of countries. While opinion is divided on whether this constituted a fundamental adjustment to the changed environment, it is felt that even if new investment was not specifically directed toward new or expanded energy sources, it nevertheless did include more modern and more efficient energy-related technology.

Partly as a result of the more moderate wage behavior, the share of profits in total activity does not appear to have fallen as sharply as during OPEC II. While comparable national statistics data in this area are difficult to come by, data on price and cost movements and on the share of wages in total factor income suggest a similar conclusion. Thus, while in 1974-1975 the share of labor in national income rose sharply in most countries, that

Table 2: Share of Labor in Domestic Factor Income (in percent)

	1970-1973	*1974*	*1975*	*1979*	*1980*
United States	77.3	79.3	78.7	79.1	79.6
Canada	72.6	70.6	72.1	69.5	68.8
Japan	56.6	63.0	65.9	65.3	65.0[e]
France	63.9	67.5	70.1	71.1	73.0
Germany	69.2	72.4	72.3	70.8	71.8
Italy	61.1	64.1	68.2	66.0	65.6
United Kingdom	76.0	80.9	82.6	79.8	81.4

Source: Bank for International Settlements.

Adjusting the Japanese Economy

The reasons for Japan's greater success after the second oil price increase seem to have been a combination of cyclical factors, quick and appropriate policy actions, and a willingness among industry and labor to share the economic burden of these increases. When the first price rise occurred in 1973, Japan was experiencing rapid growth, a high rate of capacity utilization, a rapid growth of money, and an extraordinary acceleration in inflation, in part because of a domestic speculative boom. In 1978, by contrast, Japan had a moderate rate of growth, unutilized capacity, and relatively stable prices. Meanwhile the authorities had, in 1978, made substantial progress in shifting the economy toward less energy-intensive and more technology-intensive industries in order to maintain Japan's competitiveness. The moderate nominal wage increases accepted by industry and labor helped to maintain employment and investment levels in spite of the second major oil price rise. Tight monetary policy successfully contained domestic inflation. In addition, a larger depreciation of the yen after the second price rise contributed to a sharper increase in exports and bolstered overall growth.

Walter R. Mahler, "Japan's adjustment to the increased cost of energy." *Finance and Development* (International Monetary Fund), December, 1981

share remained much more stable in 1979-1980 (see Table 2).

Second, the propensity to save generally did not rise, or at least not to the same extent, after OPEC II as after the first oil shock. In 1974-1975, large increases in nominal wages undoubtedly had led to some (perhaps unplanned) increase in savings. In addition, the higher inflation rates prevailing then made for greater losses on the real value of existing financial assets—to which the private sector responded by increased saving (see Chart 4).

Thus, while the private sector cut back its net spending between 1973 and 1975, the second oil shock produced, in many countries, a movement in private spending behavior in the opposite direction. The public sector, by contrast, was not required to support economic activity to the same extent as after OPEC I. These trends can be seen in the consumption and investment patterns of both the private and the public sectors (see Chart 5). All in all, as the Bank for International Settlements has observed, "the shock effect of the first oil crisis was probably greater than that of the second."[3]

Trends in Money Supply and Interest Rates

In the late 1970's the rate of expansion of the money supply declined steadily in most countries outside the United States (see Chart 6). That slowdown was both more pronounced and more protracted than after OPEC I, when the rates of monetary expansion had dropped in both the European Community and Japan by five percentage points in one year (1974), only to increase again during the recession of the following year. This slower growth in monetary expansion was the clear result of the tighter monetary policies pursued in the wake of OPEC II.

But it also reflected (1) the somewhat longer duration of the second oil shock; (2) the more balanced distribution of payments deficits—which tend to reduce domestic liquidity—among the industrial countries; and (3) the fact that during the years immediately preceding the second oil shock monetary expansion had been more restrained almost everywhere than in 1972 and 1973, prior to the first shock.

It should be noted, of course, that for the countries of the European Community the much hoped for and much discussed convergence of price and cost trends—still an illusory goal—as well as maintenance of a system of rigid exchange-rate relationships do not require identical rates of monetary expansion by each of the members. Institutional factors—such as different banking systems and differing definitions of money supply—and structural differences between the economies permit, or even require, divergences in the rates of money growth.

However, as the Commission of the Communities has noted wistfully, the actual divergences between the member countries' rates of monetary expansion in the 1970's "were incompatible with the Community objective of 'convergence in conditions of stability'."[4] These divergences, the Commission comments, stemmed from wide differences in member countries' monetary policies, exchange-rate movements, and inflation differentials.

An approximate guide to the degree of restrictiveness associated with a given stance of monetary policy is provided by real interest rates—that is, the difference between nominal rates and the rates of increase in a price index that can be assumed to more or less reflect the public's expectations on inflation. Such a measure of real rates will, of course, be influenced by the choice of deflator.

For instance, the annual data for the seven largest industrial countries suggest that the increase in nominal interest rates over the past several years did not generally keep pace with the acceleration of consumer prices, but that it more than kept pace with that in GNP deflators. To judge whether real interest rates fell or rose over that

(text continued on page 12)

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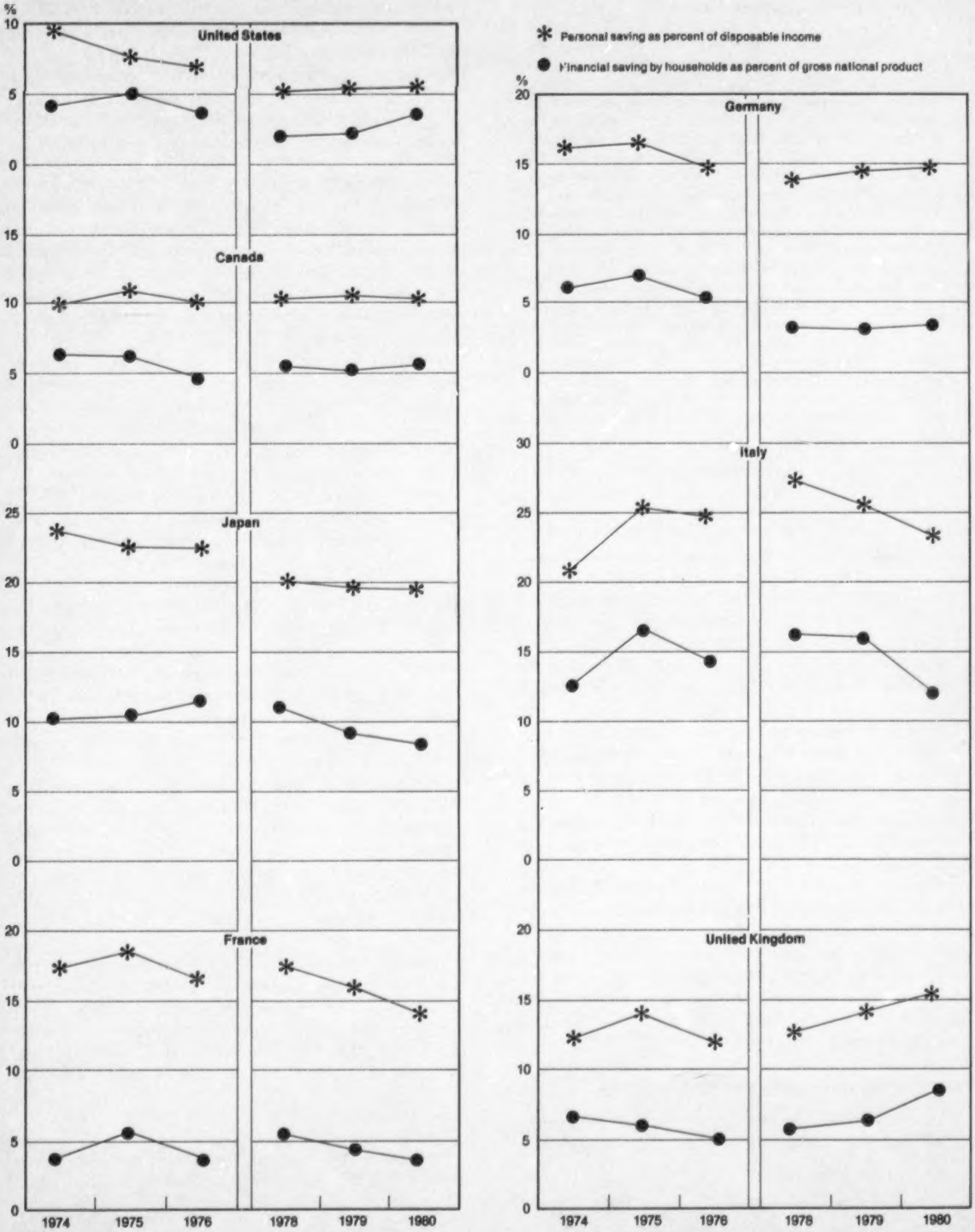
[3] Bank for International Settlements, *Fifty-First Annual Report*, p. 43.

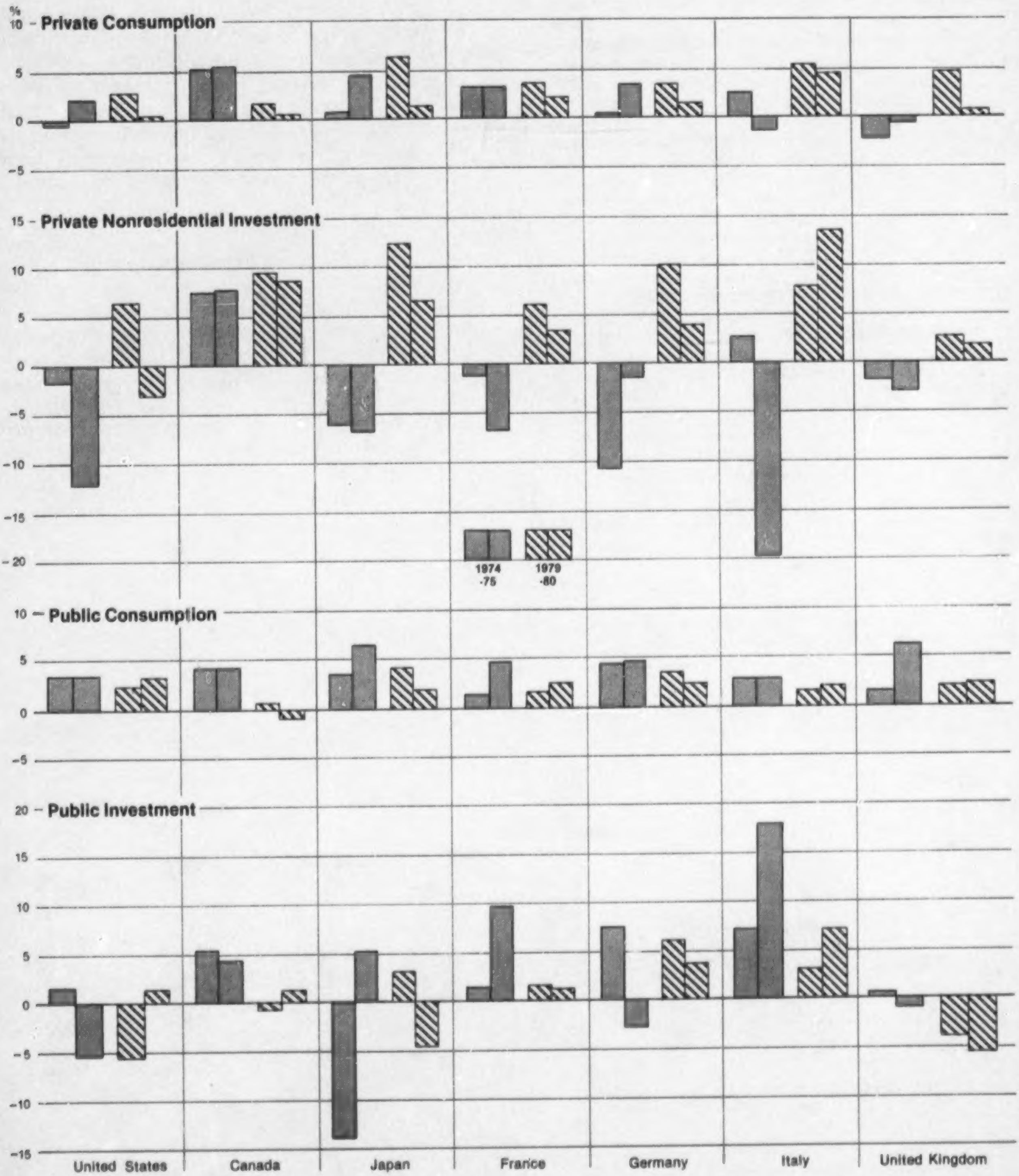
[4] Commission of the European Communities, *European Economy*, July 1981, p. 121.

Chart 4: Trend in Saving Rates, 1974-76 and 1978-80



Source: Bank for International Settlements

Chart 5: Consumption and Investment, 1974-75 and 1979-80 (annual change in percent)



Source: Bank for International Settlements

Convergence of European Economies?

[There] is a clear indication that the Member States' economies, underpinned as they are by economic, social and political structures with differing degrees of stability, still respond and adapt quite differently to pressures. Some synchronization of trends in Member States brought about by the growing interdependence of their economies and by the efforts to coordinate their economic policies appears for a while to have masked what are still deep-seated structural imbalances and all that is needed to bring these divergences into sharp relief once again is an external or internal shock. The widening divergences after 1973 stemmed in part from Member States' dependence on crude oil imports, which was more marked in some cases than in others. But it was also attributable to differing social and economic structures that strongly influenced the way in which the burden imposed by the transfer of purchasing power in favor of the oil-producing countries was apportioned between economic agents, with the wage-price link playing an important role here, and to conflicting economic policy views as to the best way of combating this loss of financial means.

Commission of the European Communities,
"The main medium-term issues: an analysis."
European Economy, July, 1981.

(text continued from page 9)

period would, therefore, depend on the choice of price series used to measure inflation.

Generally speaking, the average of real rates recorded for the seven countries for 1979-1980 was roughly 2 to 3 percentage points higher than the corresponding average for 1973-1975, regardless of the price or inflation index used. In contrast to the two years following OPEC I, when real rates were negative as inflation quickened, in 1978-1980 these rates turned positive in Germany, Japan and the United States. In France and the United Kingdom real rates were "less negative" than during the earlier episode and actually turned positive by the end of 1980.

The Role of Fiscal Policy

It has been said that in a world beset by stagflation "an assessment of the stance of fiscal policy becomes unusually difficult."[1] In connection with the effects of the two oil shocks it becomes especially interesting (and instructive) to try to chart the course of fiscal policy—to see, that is, to what extent public-sector expenditures may have countered changes in private-sector outlays. But such an assessment becomes unusually difficult indeed if it is realized that, over the past ten to fifteen years, growth in budget expenditures in most countries has

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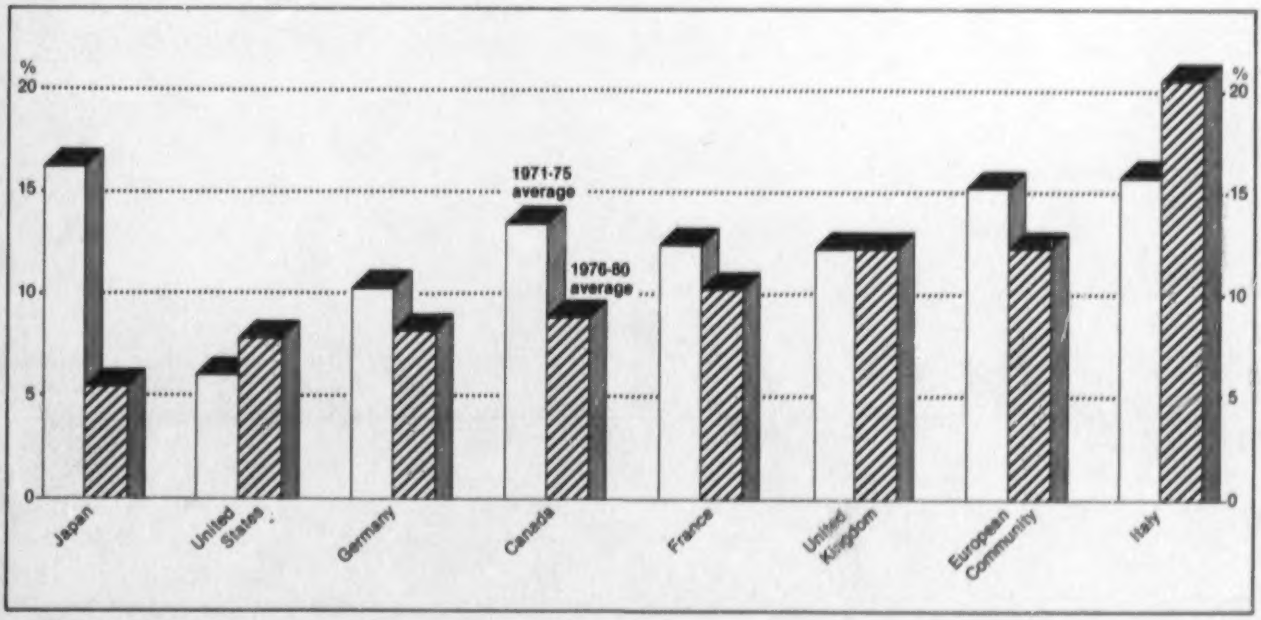
[1] Bank for International Settlements, p. 35.

Chart 6: Growth of Money Stock* (in percent)



* M_{1B} for United States and M_1 for other countries
Sources: Bank for International Settlements; Commission of the European Communities

Table 3: Central Government Fiscal Balances (as percent of gross national product)

Year	Canada	United States	Japan	France	Fed. Rep. of Germany	Italy	United Kingdom	Belgium	Nether-lands	Sweden
1973....	0.3	−0.4	−5.2	0.6	0.5	−8.3	−3.1	−2.9	0.3	1.8
1974....	0.7	−0.7	−5.8	0.3	−0.7	−7.5	−4.2	−2.8	−0.6	0.2
1975....	−2.3	−4.9	−8.9	−3.0	−3.6	−10.7	−8.0	−4.7	−3.1	0.1
1976....	−1.8	−3.4	−8.3	−1.1	−2.8	−9.1	−5.5	−5.0	−3.6	2.1
1977....	−3.6	−2.6	−7.3	−1.1	−2.2	−9.0	−3.1	−5.9	−3.1	−0.8
1978....	−4.8	−2.0	−9.2	−1.3	−2.1	−13.1	−5.1	−6.0	−3.3	−4.0
1979....	−3.5	−1.2	−8.9	−1.1	−1.9	−10.8	−5.5	−6.5	−4.4	−6.1
1980....	−3.7	−2.6	−8.6	−1.3	−1.8	−10.7	−5.0	−8.2	−4.8	−6.6

Source: International Monetary Fund

served not so much to support traditional activities and the general economy, but "the provision of health, social security, and welfare and, to a lesser extent, of education."[6]

Still, after OPEC I offsetting action to cushion the decline in private-sector spending can clearly be discerned in most countries. But it is worth noting that, with the exception of the United States, this deterioration generally was not reversed. In fact, in some countries—including Belgium, the Netherlands, and Japan—the central government deficit has tended to grow further as a percentage of gross national product (see Table 3).

It is precisely because of the persistence and continued growth of these deficits that it has become so difficult to define what the stance of fiscal policy really has been. In other words, one must ask to what extent these deficits can be seen as simply compensating for high-private sector saving and oil-related payments deficits. It is generally agreed, moreover, that high deficits complicate the task of monetary authorities, through their effects on interest rates and financial markets. In short, because of this particular fiscal-policy configuration, monetary policy generally has had to be very much tighter than otherwise would have been the case—and has had to be maintained tight much longer.

This dilemma was alluded to by Governor Wallich of the Federal Reserve before the American Economic Association last December. Mr. Wallich declared: "Fiscal policy in most countries is not part of the solution, but of the problem. Monetary policy has to do both the domestic and the international job, to the extent that one can pursue two goals with one instrument."[7]

It is possible to illustrate this dilemma more clearly by juxtaposing measures of tightness or ease of both monetary and fiscal policy. One author has done so by comparing the so-called yield curve—that is, short-term interest rates divided by long-term ones—and the public-sector deficit as a percentage of gross national product for both the United States and the United Kingdom.[8] By plotting in four quadrants the four possible combinations of easy and tight fiscal and monetary policies (tight-tight; tight-easy; easy-easy; and easy-tight), he finds over the entire postwar period only one observation—1969—of tight monetary *and* tight fiscal policies for both countries.

The vast majority of his observations lies in the quadrant representing easy money and easy fiscal policy. Both policies appear to have eased markedly throughout the early 1970's; the main tightening, when it did occur, was through monetary policy. The second half of the 1970's again saw a marked easing of both sets of policy, with the tightening since 1979 again carried by monetary measures alone. (The four episodes of easy monetary and tight fiscal policy in the United States occurred in 1951, 1956, 1957, and 1960.) Moreover, the extent of combined ease has been greater in the United Kingdom, explaining the greater inflationary experience of that country.

The Pattern of External Accounts

An important development during OPEC II, with a strong bearing on the stance and direction of policy, was the different distribution of payments imbalances from what they had been at the time of OPEC I. The second time around, deficits were concentrated to a much greater degree among the major industrial countries. Some of these were direct recipients of capital inflows from

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[6] Commission of the European Communities, p. 134.

[7] "The Federal Reserve and Interest Rates." Remarks by Henry C. Wallich, Member, Board of Governors of the Federal Reserve System, at a roundtable on "Monetary Policy and the International Impact of Interest Rates" at the annual meeting of the American Economic Association, Washington, D.C., December 28, 1981, mimeographed, p. 8.

[8] Richard Coghlan, "The conflict between monetary and fiscal policy," *The Banker*, October, 1981.

Changing the Policy Mix?

A theoretical solution to the policy conflict between monetary and fiscal measures is suggested in a recent analysis that visualizes a world in which both monetary and fiscal policy could serve as flexible and efficiently managed tools.[1] In such an ideal world, the argument goes, it would be preferable to assign to fiscal policy the job of looking after domestic stability while monetary policy concerned itself with the balance of payments or the exchange rate.

According to that analysis, a combination of tighter monetary policy and a more expansionary fiscal stance will lead to an increase in domestic interest rates, an inflow of capital, and an appreciation of the country's exchange rate, reducing its trade surplus (or increasing its deficit). The country's trading partners, it is argued, will experience outflows of capital, depreciation of their exchange rates, reduction of their trade deficits (or increases in their surpluses), and hence an expansion of demand and incomes.

The opposite policy combination—monetary expansion accompanied by fiscal restraint—would produce the opposite effects: an outflow of capital and depreciation of the exchange rate, thereby shifting demand away from the goods of the country's trading partners and reducing total demand and incomes in their economies.

Such a policy-mix prescription implies the adoption of measures that do not operate in conflicting directions on the domestic economy and thus do not hamper the authorities' ability to "fine-tune" their stabilization policies. But it suggests—perhaps somewhat blindly to existing realities—that fiscal policy, rather than monetary policy, be used as the main instrument of steering domestic economic activity.

[1] Rudiger Dornbusch and Paul Krugman, "Flexible Exchange Rates in the Short Run." *Brookings Papers on Economic Activity*, 1976, No. 3.

OPEC, while others were well placed to finance their deficits in other ways. Moreover, in 1980 as much as two-fifths of the industrial countries' combined payments deficit was borne by Germany and Japan alone (see Table 4).

In the changing global pattern of payments balances after OPEC II, two other aspects stand out. First, for all oil-importing countries—both industrial and developing—the typical current-account deficit in the early 1970's was around 3 percent of gross national product. This share reached 6 percent in 1974-1975 and rose further to over 7 percent in 1980-1981. On the other hand, for the smaller industrial countries and many of the nonoil developing ones external deficits in 1980 were smaller in relation to export earnings than after OPEC I. This was true despite the sharply increased size of these countries' external indebtedness and the higher cost of servicing that debt.

A second feature of OPEC II was the appreciation of currencies with high domestic inflation rates, particularly the dollar and sterling, and the depreciation of currencies with low inflation rates, such as the D-mark, the Swiss franc, and, briefly, the yen. These parallel developments—which in some instances antedated OPEC II—tended to weaken the international competitive positions of high-inflation countries and to strengthen those of low-inflation countries. (A deterioration or improvement in a country's international competitive position is indicated by a stronger upward or downward movement in its exchange rate than in its costs and prices.)

Three main factors appear to have been at work in bringing about such divergences between exchange rates and cost and price movements. First, in a number of cases earlier exchange-rate movements had assumed such substantial proportions that there was little margin for expectations of further movement in the same direction. Witness the substantial appreciations of the D-mark, the Swiss franc, and the yen, which by 1978-1979 had risen by 60, 103 and 45 percent, respectively, since the end of 1972. At its low point in late 1978, the dollar, for its part, stood some 20 percent below its end-of-1972 level. Partly as a result of these sharp one-way swings, these four currencies all experienced substantial turnarounds in their payments balances.

A second factor that contributed to differences in exchange-rate movements from international inflation differentials was that Canada, the United Kingdom, and the United States—three countries with high inflation rates—all happened to be favorably placed with respect to domestic oil supplies. In the United States, this factor was reinforced by decontrol of domestic oil prices.

Third, the movement of exchange rates was influenced in both the United Kingdom and the United States by the adoption of more determined anti-inflationary policies. These relied heavily on tighter domestic monetary controls and thereby put strong upward pressure on domestic interest rates which, in turn, widened the interest-rate differential in favor of those countries.

To complete the policy record of the OPEC II period, it is worth noting that even when their currencies were appreciating, Germany, Japan and Switzerland took measures designed to reduce domestic demand. Such actions ran counter to the standard textbook axiom that exchange-rate changes will have the desired effects on the balance of payments only if they are accompanied by appropriate domestic policy measures. In the context of an appreciating currency, this would mean expansionary measures to stimulate domestic spending. But since these three countries' primary objective throughout the period was to avoid inflation rather than to reduce their payments surpluses, appreciation of the exchange rate was seen by them as aiding the former rather than the latter goal.[9]

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[9] For a discussion of this point, see David Higham, "Strong Currencies and Economic Performance: Lessons from Germany, Japan and Switzerland," *Three Banks Review*, Edinburgh, June 1981.

Table 4: Current-Account Balances (billions of dollars)

	1973	1974	1975	1976	1977	1978	1979	1980
Industrial countries	19.3	—12.4	17.1	—2.1	—5.5	30.1	—10.7	—44.0
United States	9.9	7.6	21.2	7.5	—11.3	—11.1	2.8	8.4
Germany	7.1	13.0	7.7	7.7	8.5	13.5	0.9	— 8.5
Japan	0.1	—4.5	—0.4	3.9	11.1	18.0	—8.0	—9.5
Oil-Exporting countries	6.6	67.8	35.0	40.0	31.1	3.3	68.4	112.2
Nonoil developing countries	—11.5	—36.8	—46.5	—32.9	—29.6	—37.1	—56.1	—80.4

Source: International Monetary Fund

Concluding Remarks

In its latest (1981) annual report, the International Monetary Fund pointed out that, while the world economic situation might be fraught with problems and difficulties, "any balanced assessment must also take note of certain positive or encouraging aspects" (page 36). Among the latter, the Fund underscored the fact that the industrial countries' policy response to OPEC II was so much better than in the case of OPEC I, and that the ensuing adjustment, therefore, proceeded more smoothly.

As this report has made clear, there was a striking difference between the reaction to the two oil-price hikes and, as a result, between the ensuing economic adjustments. In the wake of OPEC II, monetary policies were generally more restrictive, wage increases remained more restrained, profits were squeezed less severely, investment tended to hold up better, and the repercussions of the higher oil price on the overall price level were more limited. In view of all this, the Organization for Economic Cooperation and Development was able to conclude last December that "the demand-depressing effects of the 1979-80 oil price rise now seem largely to have worked themselves through."[10]

However, it is indisputable that, even with the effects of OPEC II largely assimilated, the industrial countries' major problems—slow growth and high inflation rates—will continue. This would seem to argue that the two oil-price increases of the last decade, and particularly that of 1979-1980, cannot be blamed for all of our current ills. Some observers, in fact, have criticized the authorities for allegedly contributing to the depth and duration of the current recession by overreacting to OPEC II, and thereby making things even worse.

It is, of course, moot to argue what the course of economic activity in the major industrial countries might have been had policies been different. This is especially true at the present juncture when there is such profound disagreement over the effects of various policy mechanisms and their timing. But the "positive or encouraging" results of recent policies must include the noticeable slowing down of inflation in late 1981 and early 1982. These lower inflation rates have also reflected more moderate food price increases following good harvests and softer commodity prices as a result of slacker demand. Moreover, with unemployment high and (presumably) a heightened understanding that real-income losses from high oil prices had to be accepted, wage demands remained moderate in 1980 and continued to remain so in some countries last year.

It will be especially interesting to track the course of economic activity now that oil prices have begun to decline not only in real, but even in absolute, terms. It is extremely unlikely that this development by itself will help overcome the problem of "stagflation"—that is, the combination of high inflation, slow growth, and high unemployment that was built up in the 1960's and 1970's. Because that economic disease, "a rare malady that had not previously afflicted the industrial West,"[11] was fully recognized and diagnosed at about the time OPEC first flexed its muscle in the winter of 1973-1974, many observers have been tempted to lay our current problems largely at OPEC's door.

But a closer look suggests a different conclusion—namely, that the most important causes of stagflation are not external. These include the expansion of government and of government regulation; the indexation of incomes; declining productivity growth; and protectionist tendencies, to name only a few. It is highly likely that at least some of these factors will still be with us at a time when both OPEC I and OPEC II will have become no more than interesting and instructive exercises for students of international economics and finance.

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[10] Organization for Economic Cooperation and Development, *Economic Outlook*, December, 1981, p. 5.

[11] Harold van B. Cleveland, and Thomas F. Huertas, "Stagflation: How We Got Into It—How To Get Out," *Foreign Affairs*, Fall, 1979, p. 103.

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Research Bulletin

Debt Financing:
Techniques and Trends

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Introduction

Persistent, although somewhat declining, inflation; high and volatile interest rates; and governmental forays to finance pending programs and deficits are paramount among the influences causing change in the debt markets. Although investors are attracted by high interest rates, fear of losses in portfolio values or purchasing power—due to further increases in rates or failure to bring inflation under control—gives them pause in making long-term commitments. Similarly, would-be borrowers with real needs hesitate to burden themselves with high-cost obligations beyond a short-term, lest subsequently falling rates produce better financing opportunities. While such dilemmas undoubtedly contributed to the more than $10 billion dollar decline in net corporate bond sales in 1981 from the $37.2 billion recorded in 1980, issuers and buyers are adjusting to prevailing conditions.

This survey was undertaken to determine how corporations are coping with financing problems in these trying times by exploring approaches now used or being contemplated. Based primarily on questionnaire responses from 107 companies, virtually all of which are large and publicly owned (63 manufacturers, including several diversified concerns also engaged in mining or transportation; 36 utilities; and 8 retailers), this report also draws on other information, including a limited number of interviews.

Recent and Proposed Debt Financings

During the past two years, through the Summer of 1981, 77 participating companies have used a variety of means to approach the long-term taxable debt market (Table 1). Twenty-seven participants—twenty-one manufacturers, four utilities, and two retailers—did not borrow; three manufacturers did not comment on their activities.

The financing patterns revealed by recent borrowings are pretty much routine. Firms in the three industry groups rely on one or a combination of traditional sources for the bulk of their financing needs. Although fewer in number than their manufacturing counterparts, utilities accounted for slightly more offerings during the period.

Table 1 provides only a hint—the four deep-discount bond financings reported by manufacturers—of the changes taking place in the debt market. Better indication comes from the detailed responses of participants, some of whom advise that while standard financing instruments were used, certain nuances were integral to them. For example, several mention settling for shorter maturities than usual, borrowing in foreign currencies, and making direct placements to income funds.

Ninety participants plan debt financings during the next two years. Sixteen of them—twelve manufacturers, one utility, and three retailers—do not anticipate borrowing; one manufacturer did not reveal its plans. Table 2 confirms the move toward innovation begun earlier in the rising number of esoteric financings—deep-discount and variable rate or indexed issues—reflected. Further evidence of this trend is found in the comments of some in the "to be determined" category, who indicate a willingness to adapt financing designs to the demands of the marketplace.

Rationale

Regardless of the approach, or combination of approaches taken, and whether referring to accomplished or proposed financings, companies offer one or more of the following reasons for their choices:

- Flexibility
- Cost
- Suitability
- Necessity

Because the ability to raise funds during emergencies or

Table 1: Actual (1979-1981) Debt Financings by 77 Participating Companies

	Number of Companies			
Financing Approach	*Manufacturing*	*Utility*	*Retail*	*Total*
Debentures	11	11	3	25
Mortgage bonds	—	23	1	24
Private placements	13	5	1	19
Notes	10	2	1	13
Term bank loans	3	8	1	12
Convertible debentures	6	—	1	7
Deep-discount bonds	4	—	—	4
Other[1]	2	4	—	6
Total	49	53	8	110

[1] Includes equipment trust financing, bankers acceptance facility, commercial paper borrowing supported by letter of credit, nuclear fuel financing, and project financing.

Table 2: Proposed (1982-1983) Debt Financings by 90 Participating Companies

Financing Approach	Number of Companies Manufacturing	Utility	Retail	Total
Debentures	16	14	2	32
Mortgage bonds	—	18	1	19
To be determined	14	3	2	19
Deep-discount bonds	7	—	1	8
Private placements	2	4	2	8
Convertible debentures	6	2	—	8
Term bank loans	3	3	1	7
Notes	2	2	—	4
Variable rate or indexed bonds	2	2	—	4
Other	3[a]	—	—	3
Total	55	48	9	112

[a] Includes leveraged lease and equipment trust financings.

when opportunities present themselves is crucial to corporate well-being, many financial executives take pains to ensure it. They always like to have alternatives in the event a particular financing avenue become clogged, and accordingly select instruments that provide options. For example, the chief financial officer of a diversified manufacturer explains:

> "It has long been [the company's] policy to maintain a debt level not to exceed 35 percent of total capitalization, except possibly for very short periods of time. In view of this policy, we felt at the time of the last financing that it would be wise to issue convertible preference stock and thus not have our debt reach a level that would only permit one form of financing—equity—in the future."

Aid in the achievement of capitalization ratios is not the sole source of flexibility claimed for chosen financing approaches. A few believe the use of subordinated debentures, especially those with senior liquidation rights, facilitates prospective borrowings. And a couple that rely on private placements claim that the relative ease with which covenants—on fixed-charge coverages, for instance—can be modified gives them considerable financing maneuverability.

Of course, cost is a very important consideration in arranging any financing because the lower the price, the greater the potential for profit. Participants are quick to note the savings on interest rates that attach to their use of particular debt instruments, notably convertible debentures and mortgage bonds. They indicate that the use of convertible debt enables issuers to save many basis points in coupon costs because purchasers are willing to accept lower rates for the chance to realize capital gains by exchanging debt holdings for common stock at an opportune time. Similarly, several firms using mortgage bonds find that because these instruments are secured, lower rates attach to them than to such unsecured issues as debenture bonds. But an occasional respondent claims that the cost of administering mortgage bonds makes them more expensive in the long run than their unsecured correspondents.

Almost all users, actual and prospective, of original-issue discount obligations cite savings as an edge such securities offer vis-a-vis straight debentures. This claimed plus and others, as well as the minuses attributed to these innovative instruments, are explored in the next section.

Appropriateness as determined by a consideration of available alternatives, present and projected needs, and cost and capital-structure goals holds the key for many companies in deciding upon a debt-financing route. Thus, for some seeking future improvement in debt ratios without resorting to equity sales because of currently depressed stock prices, convertible debentures are deemed most suitable. Others, anxious to extend debt maturities, also find convertibles more fitting than straight debentures. Still others hold revolving credits best fit their needs by providing interim financing, which can be re-funded with more permanent financing when and if long-term rates drop.

But not all are able to pick and choose. Market and industry conditions sometimes heavily influence financing approaches. A utility executive indicates, for instance, that because of capital intensity "it has been necessary for us to seek out every conceivable form of financing . . ." And a few others with pressing needs for funds make it clear that buyer preferences outweigh their own in shaping financings.

Innovative Debt Instruments

While unsettled conditions over the past couple of years caused disarray in the debt market, they did not eliminate its viability by any means. Indeed, they prompted fairly widespread improvisation among borrowers, lenders and intermediaries to arrange deals that would meet the requirements of all parties. The result: a group of new, or at least revitalized, financing arrangements that give credence to the old saw that "where there's a will there's a way." Together with conventional approaches (see accompanying box) they have enabled most corporations to weather the troubled period.

Deep-Discount Bonds

Although some lower credit-quality companies have long offered issues at discounts from par and even a few highly regarded firms have taken the same route in private placements, it was only recently that firms with strong bond ratings started to use this approach in public financings. Actually, deep-discount bonds take either of two forms: (1) standard instruments, which are priced at less than par and pay interest at less than the current market rate; and (2) zero-coupon instruments, which are priced substantially below par and provide no current interest payments whatsoever. Both variations are redeemable at par at maturity. (A rarely seen wrinkle adds a convertibility privilege to such issues.) An example of a standard deep-discount offering: a $300 million dollar issue priced at 50 percent of stated value, paying 6.75 percent interest, redeemable at 100 percent of face value and maturing in 20 years. An example of a zero-coupon offering: a $600 million dollar issue priced at 25 percent of face value, free of current interest but redeemable at 100 percent of face value and maturing in ten years. Gross proceeds to the issuers would amount to $150 million in each of these offerings.

Corporations realized more than $3.4 billion from the sale of deep-discount (including zero-coupon) bonds during 1981.[1] The rewards such issues offered to both sellers and buyers in the prevailing milieu undoubtedly account for their increasing popularity.

Corporate issuers can reap savings by selecting deep-discount rather than straight-debenture offerings. Investors are willing to accept a coupon 50 or so basis points less than would attach to a conventional issue because the need to reinvest interest payments, perhaps at lower than original yields, is eliminated. And the deduction on the issuer's federal tax return of all the implicit interest charges each year, even though only the coupon rate (if one exists) is paid out, also serves to lower the effective borrowing cost. Exhibits 1 and 2 illustrate the discounted cash-flow internal rate-of-return approach many employ to contrast costs of conventional issues with those of deep-discount and zero-coupon issues.

Boosters of deep-discount offerings maintain that their advantages extend beyond cost reductions. Some say

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[1] Merrill Lynch Pierce Fenner & Smith, Inc., *Bond Market Comment*, Volume 4, Numbers 44 and 51, 1981.

Traditional Debt Instruments

Short-term

Trade Credit—a major source of intercompany financing in which one company gives time to another for payment of goods sold on trust. Often arranged on open account (that is, without use of a debt instrument other than an invoice), such credit may extend for 30 to 60 days or even longer, depending upon industry practices. Promissory notes, bankers' acceptances, or trade acceptances are sometimes employed to document intercompany transactions.

Commercial Paper—unsecured promissory notes of limited duration (270 days or less) sold by companies in the money market, usually for working capital purposes.

Lines of Credit—commitments by commercial banks to lend specified amounts to companies for stipulated periods. Such pledges, though not legally binding on banks, are usually honored. They are typically unsecured, of one-year term, call for an annual cleanup (period of 30 days or so during which no borrowings are outstanding under the line), and are renewable.

Long-term

Bank loans—secured or unsecured advances from commercial banks to companies. Terms may extend up to ten years or more with repayment schedules subject to negotiation. Under revolving credit agreements, companies are permitted to renew short-term note obligations to creditor banks during a specified number of years.

Bonds—long-term promissory notes that have maturities of up to 30 or 40 years, or even longer. Debentures are unsecured long-term obligations. Convertible debentures give holders the right to receive repayment in common shares of issuers instead of cash. Mortgage bonds are long-term corporate obligations that are secured by real property.

Private placements—securities, often corporate notes with maturities of up to ten or more years or preferred issues subject to retirement, sold directly by corporations to investors without the underwriting services of investment bankers. Life insurance companies are prominent sources of such funds.

such issues enable them to obtain lengthier maturities than would be possible were conventional instruments employed. (A number of deep-discount bonds have carried 30-year terms.) Ease of marketing and frequent absence of sinking-fund requirements are other features that some deep-discount obligation issuers find attractive.

Of course, deep-discount issues are not without disadvantages to sellers. One is the need to make a balloon payment (the entire principal) at the time of maturity. But perhaps the greatest drawback is that refundings are impractical, even in the absence of banning provisions, should interest rates decline dramatically. It would be uneconomical to call a deep-discount issue at par for many years under all but extraordinary circumstances.

Tax-exempt purchasers, like pension funds, are usually drawn to these issues because they are not affected by the income tax requirement to report interest income, even though some or all of it is deferred until maturity. And, as already noted, competitive returns and virtual freedom from reinvestment concern, particularly if an interest rate decline is suspected, also serve as appeals.

There are other attractions, too. Many institutional investors buy deep-discount issues via swaps. These arrangements enable investors to dispose of old low-coupon bonds already on their books without realizing losses (rising interest rates have eroded market prices) by exchanging them with underwriters for new issues, perhaps with better yields. Others simply like the increased diversification possibilities offered by issues selling at substantial discounts from par.

Floating and Variable-Rate Debt

Many investors do not believe that interest rates have reached their peaks. Consequently, they are unwilling to commit their funds for long periods of time at present rates of return. Several participants in this survey hope to lure these reluctant purchasers by offering floating or variable-rate obligations.

Floating-rate issues pay interest frequently, sometimes monthly. Rates are based on those for commercial paper, or the like, and are adjusted as often as weekly. Variable-rate debt is subject to less frequent adjustment—every two years or so—and rates are usually tied to those for longer term issues such as Treasury notes. In rare instances, bond rates may be adjusted upward if the issuing company's profits climb above stipulated levels, or if the price of a designated commodity rises materially.

Many queried respondents claim these issues facilitate financings because they enable issuers and purchasers to avoid betting on the future course of interest rates, and thus to deal better with inflationary swings. And a few maintain that adjustable-rate debt can help secure longer maturities or even, in some respects, serve as a substitute for commercial paper borrowings.

However, other participants believe that unless issuers are convinced rates are going to decline, or have a very compelling need for financing, floating- or variable-rate

Exhibit 1: Comparative Cash Flow Analysis of Par Bonds[1] and Discount Bonds[2]—A Utility Company

Type	*Time*	*Before Tax*	*Tax Effect*	*After Tax*	*Present-Value Factor*	*After-Tax Present-Value Cost*
Par Bonds[1]						
Proceeds	0	$94,211,250	—	$94,211,250	1.000000	$94,211,250
Interest	1-60	(6,241,495)	.54	(3,370,407)	24.560006	(82,777,216)
Principal	60	(94,211,250)	—	(94,211,250)	.121364	(11,433,854)
Rounding Difference						$ 180
Implied after-tax cost is 6.6406%						
Deep Discount[2]						
Proceeds	0	$94,211,250	—	$94,211,250	1.000000	$94,211,250
Interest	1-60	(6,125,000)	.54	(3,307,500)	25.875033	(85,581,672)
Amortization of discount	1-60	1,346,479	.46	619,380	25.875033	16,026,478
Principal	60	(175,000,000)	—	(175,000,000)	.140894	(24,656,450)
Rounding Difference						$ (394)

Implied after-tax cost is 6.6406%.
After-tax cost savings of deep-discount financing: 51 basis points.

[1] Based on a 30-year bond with a 13.25% coupon offered at 100; theoretically the rate would be 75 to 100 basis points higher.

[2] Based on a 30-year bond with a 7% coupon offered at 53.835, or a 13.25% effective yield. (Actual Martin Marietta Corporation debenture offering)

Exhibit 2: Comparative Cash Flow Analysis of Par Bonds[1] and Zero Coupon Bonds[2]—A Utility Company

Type	*Time*	*Before Tax*	*Tax Effect*	*After Tax*	*Present-Value Factor*	*After-Tax Present-Value Cost*
Par Bonds[1]						
Proceeds	0	$25,842,000	—	$25,842,000	1.00000	$25,842,000
Interest	1-20	(1,808,940)	.54	(976,828)	13.85860	(13,537,469)
Principal	20	(25,842,000)	—	(25,842,000)	.47612	(12,303,893)
Rounding Difference						$ 638
Implied after-tax cost is 7.561%						
Zero Coupon[2]						
Proceeds	0	$25,842,000	—	$25,842,000	1.00000	$25,842,000
Interest	1-20	0	.54	0	14.18296	0
Amortization of discount	1-20	3,707,900	.46	1,705,634	14.18296	24,190,939
Principal	20	(100,000,000)	—	(100,000,000)	.50033	(50,033,000)
Rounding Difference						$ (61)
Implied after-tax cost is 7.046%.						
After-tax cost savings of zero coupon financing: 51 basis points.						

[1] Based on a ten-year bond with a 14% coupon offered at 100; theoretically the rate would be 75 to 100 basis points higher.

[2] Based on a 10-year bond with a 0% coupon offered at 25.842, or a 14% effective yield.

issues should be avoided. Detractors fear the assumption of unpredictable burdens that could prove too heavy should rates unexpectedly rise. They are also convinced that these financings involve extra risk, make planning difficult, and carry the seeds of credit-rating problems.

While seldom employed by participating companies and hardly coming to the fore, other novel bonds are starting to be issued. These include bonds (or notes or preferred shares) with puts, warrants or equity participations. All are designed to bolster debt marketability by protecting investors from the ravages of inflation or offering them profit-enhancement possibilities. Bonds with puts appeal to buyers anxious to avoid being left with portfolio losses in the event interest rates should climb from levels prevailing at the time of purchase. Put attachments give such purchasers the comfort they desire by granting them the right to resell bonds to issuers at par value at specified periodic intervals prior to maturity. Naturally, there is a quid pro quo; investors in debt issues of this kind settle for a somewhat lower coupon rate than would attach to a straight obligation.

When issued with warrants, bonds tend to find favor among investors who believe interest rates are at or near their zenith. In effect, these instruments allow purchasers to buy additional bonds at the original price during a period of, say, six months following the original offering. By "doubling up" following a decline in rates, a purchaser could probably exercise such a right profitably; the market prices of bonds acquired in such subsequent purchases would exceed the original or par offering prices because of the higher than prevailing coupon attached to them.

Occasionally bonds are offered in packages that include equity participations. Thus an instrument selling for $1000, or par, might consist of a bond and five shares of common stock of the issuer. The bond itself, actually sold at a discount, would be redeemable at par. Anything realized from the eventual disposal of the shares would be a bonus. Similarly, to avoid selling equity below book value during adverse markets, firms may offer preferred shares that are redeemable in common shares—perhaps even at a discount from market, but at a future time when conditions might be more propitious.

Other new attractions include promising payment of bonds at maturity in either of two currencies—sterling or dollars, for instance—at pre-set exchange rates, or for either cash or the cash value of a specified number of ounces of silver, and permitting investors to extend notes at stipulated intervals. Such "bells and whistles" are intended to add to the allure of instruments once considered very staid.

Other Novel Approaches

Asset-based financings, many employing leasing arrangements with special twists, are also being tried. Provisions of the Economic Recovery Tax Act (ERTA) of 1981 have liberalized leasing regulations by encouraging the transfer of tax benefits through the use of sale leaseback arrangements.[3]

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[3] For a discussion of the new leasing provisions and an illustration of the tax-benefit sharing they afford, see Michael E. Levy and others, *Economic Policy Issues*, The Conference Board, 1981, No. 4.

For example, a firm with either a minimal or nonexistent taxable net income could invest in new facilities, sell them and their related depreciation and investment credit tax benefits to a profitable company, and then lease the facilities back for its own use. Such transactions are estimated to have enabled companies selling tax benefits on purchased facilities to realize over $2 billion in 1981. But they are currently under attack in Congress and their future is uncertain.

Some companies, utilities as well as industrials, are getting financial assistance from unusual quarters. Construction costs for generating units, as well as mills, are being underwritten by customers that ultimately seek to receive the output of these facilities.

Debt-Equity Trades

While neither re-funding nor debt financing, debt-equity trades are considered because of the impact they exert on corporate indebtedness and profitability. These swaps, as they are commonly called, entail nothing more than exchanging common shares for outstanding obligations in like amounts. Why should these mundane transactions cause such a stir? They are increasingly being examined and resorted to because they offer some companies an excellent means of strengthening capital structures and boosting earnings.

The workings of debt-equity swaps are probably best illustrated through the use of an example. Consider Able Corporation's 30-year bonds, carrying 8 percent coupons, issued ten years ago. Because bonds of comparable quality now command yields of about 16 percent, Able's bonds are trading at approximately 50 percent below par. Able could buy the bonds back directly in the marketplace and reap a profit (the difference between the par offering price and the lower repurchasing price). However, since the beginning of 1981 when provisions of the Bankruptcy Act of 1980 took effect, gains on bond repurchases for cash became taxable.

To circumvent the taxation problem, Able's investment bankers purchase bonds at discount prices in the marketplace, and swap them with Able for common shares of comparable value held in the treasury or originally offered. The results: Able buys back bonds sold for, say, $6 million by issuing common stock worth about $3 million to its investment bankers. The $3 million profit is tax free because it qualifies as an exchange of securities. In addition to upping earnings, Able has reduced the percentage of debt in its capitalization and thereby added to its borrowing potential.

As might be expected, the investment bankers do not go unrewarded. Besides the obvious goodwill engendered, commissions flow from the arrangement of swaps, and profits may also be realized on the ultimate disposal of Able's shares.

Fixtures or Fads?

Will "gimmicks" endure or quickly pass from the scene in the event interest rates decline sharply? While opinions vary among respondents, only 23 believe innovations would drop by the wayside were long-term borrowing costs to plummet. Twenty-nine of the other sixty-six providing an answer expect recent innovations to evolve into standards. Twenty-four foresee diminished need for novel approaches—especially deep-discount obligations—since investors will hardly commit funds for lengthy periods just to obtain a guaranteed, albeit low, rate of return. (But, as shown in the quotes below, one respondent objects to this oft-expressed view.) Nine are too unsure to offer a forecast, and four anticipate not only a wider usage but also a broader array of innovative techniques.

Here are some representative comments:

"Most innovative debt financing would prove a passing fad if long-term interest rates dropped sharply and stayed down for a period of at least two years. As interest rates get lower, the advantages of most innovative debt financing become minimal."

Vice President and treasurer,
a manufacturing company

* * *

"A sharp drop in interest rates will not mean an end to innovative financing techniques. The two most popular recent innovations, variable-rate or indexed debt and deep-discount or zero-coupon debt, will retain their relative attractiveness regardless of the level of interest rates. In both cases, stability is more important than the level of interest rates. The variable-rate, or indexed debt protects the investor from volatility by providing a constant spread over the then current capital cost throughout the life of the issue. This lessens the risk of erosion of the value of the investor's asset. The zero-coupon or deep-discount issues decrease rate volatility for the investor by locking in the reinvestment rate. In addition, they offer protection against early redemption and potential for price improvement. The issuer will remain attracted so long as current tax benefits exist. In summary, the investor has been 'burned' too often in the past several years by short-lived bond rallies to give up the techniques devised to lessen his exposure to such occurrences without demonstrable proof that rates have stabilized."

Assistant vice president-finance,
a utility company

* * *

"I expect innovative debt instruments will continue to be devised, although probably at a much slower pace, if interest rates drop sharply. Most innovative techniques are the result of investment or commercial bankers trying to attract a specific group of lenders and to create a marketable product to gain clients or of company finance officers attempting to find a solution to a problem that is more or less unique to their company. There are also opportunities to take advantage of peculiarities in tax laws from time to time. These situations will continue to exist."

Treasurer, a manufacturing company

* * *

"As long as the field of corporate finance attracts innovative, imaginative people, there will always be developments to help corporations meet their financing programs in a manner that will effect savings."

Treasurer, a utility company

Ahead in the Debt Market

Survey respondents, in general, anticipate the prolongation of the present difficult conditions in the long-term debt market. Only a small minority anticipates a return to the halcyon days when long-term funds were readily available at relatively inexpensive cost. Table 3 reflects participants' expectations with respect to the coming five years.

Table 3: Expected Changes in Long-term Debt Market, 1982-1986

Forecast	*Number of Mentions*
Continuance of prevailing volatility	43
Shortened maturities	36
Impact of economic policies decisive	23
Return toward historical pattern	16
Diminished accessibility	8
Greater reliance on foreign markets	7
Total mentions	133

Forty-three of the financial executives responding foresee a continuation of volatility. They believe the period ahead will be marked by rapid movement requiring considerable nimbleness on the part of long-term credit seekers. For example, a mining company financial executive of this persuasion warns "that there will at least be periodic scrambles for capital during the early 1980's; and all companies, in order to acquire debt, will have to be imaginative and responsive to changing market conditions." (The experimental Securities and Exchange Commission [SEC] rule permitting shelf registration of possible issues may allow firms to improve sharply the timing of offerings to take advantage of rate or price "windows.")

Thirty-six participating executives believe the days of truly lengthy maturities—30 or 40 years or even longer—are gone. These participants see the duration of debt instruments contracting, sometimes sharply, in the years ahead as both lenders and borrowers attempt to deal with the various disruptive forces that have buffeted the debt market of late. A retailing executive, for example, expects "a shortening of maturities, with fixed-rate maturities in excess of 15 years being the exception rather than the rule."

Many respondents are of the opinion that the course of the debt market over the next few years is largely dependent upon the outcome of the Administration's economic policies, especially as they have an impact on inflation and deficits. Their success, they believe, would prompt a return to stability; their failure, a continuation of the existing turbulence.

Some of those queried see the market returning to its historical pattern. Lower inflation and interest rates are viewed as the catalysts that will induce issuers to offer long-term fixed-rate debt instruments and buyers to accept them. However, several of this conviction temper their prognostications by admitting wishful thinking may, to some extent, underlie them.

Eight of those surveyed see the debt market becoming far more discriminating in the years ahead. If the scenario they envision actually unfolds, credit standards will be raised and only borrowers with top credentials will be able to float public issues. Others, with lower ratings, will have to look elsewhere for funding. And purchasers of private placements are also expected to become less accommodating and more insistent upon restrictive covenants in loan agreements.

Neither the attractive rates recently available in the dollar-denominated Eurobond market, nor those available in the Swiss franc, Kuwaiti dinar, and Japanese yen markets have gone unnoticed. Seven participants expect domestic firms to take increasing advantage of such overseas opportunities in the future. Issuance of foreign currency bonds is expected to grow, especially when rate differentials between foreign and domestic markets are deemed sufficient to compensate for the exchange and political risks involved in these financings. And international banking facilities (IBF's), such as that newly established in New York, may prove attractive borrowing sources for overseas subsidiaries of domestic corporations.

Role of Financial Futures

Financial futures (or interest-rate futures as they are often called) are agreements to take or make deliveries of underlying securities, such as Treasury bills, on fixed future dates for prices set at the time of contract. They may be employed for speculation or for protection against interest-rate fluctuations. While these contracts call for actual delivery of the instruments, the vast bulk are closed out by offsetting transactions before actual transfers take place.

To provide an indication of how a firm might use the financial futures market to hedge its interest-rate bets, a simple illustration is useful. Consider the case of a prospective borrower that contemplates a $100 million debt issue some months hence. If management believes interest rates at the offering time will be considerably higher than at the planning time, it may decide to sell short 500 to 1,000 Treasury bond futures contracts. Since each contract represents $100 thousand, the entire transaction involves $50 to $100 million. Provided interest rates rise as anticipated, the borrower might have to pay 100 basis points or so above what might have been required earlier for the financing, but it would be able to buy back the futures contracts at a profit (prices fall as rates rise) and thus mitigate the impact of the rate increase. Of course, a lower coupon would attach to the offering were rates to fall in the interim, but a loss (prices rise as rates fall) would be sustained in closing out the interest-rate contract and a higher effective cost would apply to the issue than had the futures transaction been foregone entirely. Therein, for many companies, lies the rub.

Among those queried, the use of financial futures is quite limited. Seventy-two of the ninety-four executives commenting have neither employed nor evaluated them. (One of these clarifies his response by indicating an absence of direct involvement, suggesting his firm may be the beneficiary of one or more of the interest-rate protection programs based on financial futures being offered by certain financial institutions.) Nineteen other participants have considered or are studying the various applications of interest-rate futures. While none of these is presently relying on financial futures, some anticipate their eventual implementation. Only three respondents now use financial futures to help control their interest costs—ordinarily in connection with the issuance of commercial paper or the investment of short-term funds.

Why is direct corporate use of financial futures so restricted? There are a number of possible explanations. For one, some consider such dealings to be unduly chancy and outside the realm of sound business practices. (Boosters of futures trading demur, maintaining that failure to hedge, especially by rate-sensitive organizations, actually constitutes speculation.) For another, futures trading in interest rates is a complex area involving opportunity as well as realized gains and losses that requires experienced managers, not presently available in adequate numbers.

The difficulty encountered in arranging a perfect hedge is also a deterrent. Cross or imperfect hedges—the use of Treasury bill futures to control interest rate costs on the rollover of commercial paper, for instance—may not produce precisely offsetting moves and are, therefore, deemed inefficient by detractors.

Other reasons advanced for the avoidance of interest-rate futures include uncertainty regarding legal and accounting issues and, on the part of utilities, anxiety about creating rate-related regulatory problems. And a few that attempt to adjust debt maturities based on their thoughts on interest rate trends, or that employ floating-rate debt, find futures redundant.

Industrial Revenue Bonds

Industrial revenue bonds (IRB's) or industrial development bonds (IDB's), as they are often termed, are tax-exempt obligations issued by states, local governments, or their agencies, on behalf of private corporations. Typically, proceeds of these financings are used to construct facilities that are leased to companies. Rental payments under the lease arrangements are used to service and retire the IRB's before title to the facilities is passed to the corportions enjoying them.

Although available for almost half a century, IRB's were little used initially, with only a few southern states employing them to attract industry. Nowadays, their use is widespread, with all save a handful of the 50 states authorizing them.

Because interest payments on IRB's are not subject to federal income taxes, corporate users can offer lower rates on them than would otherwise be possible and thus realize significant savings. Of course, except for pollution control and certain other public welfare facilities, a project must conform with the $10 million limitation on capital expenditures established by the Revenue Act of 1978 in each eligible jurisdiction to quality for IRB financing.

On account of the dollar constraint, projects financed through IRB's tend to be of modest size. But this restriction has not proven a serious impediment to all. Indeed, many with a need for modestly priced, geographically dispersed facilities, including very large corporations, have found such financings a boon.

While originally designed to encourage industrial development, usually by attracting small firms to an area, IRB's are increasingly being used by larger companies to establish retail and service outlets. The amount of such financings was estimated at several billion dollars in 1980—with at least a small percentage of these obligations represented by 30-year floating-rate bonds. The sale of other IRB's—those for pollution control which are not subject to quantity limits—added considerably to the total volume.

Past and Contemplated Use

Seventy-three, or about three-fourths of the 97 commenting participants, indicate that they have utilized IRB financing on one or more past occasions. Lower cost was the overwhelming reason adduced for the use of this approach. The lengthy maturities available through this financing technique received infrequent mention.

Some of the 24 respondents who have not relied on IRB's for any part of their financing programs explain that they had few eligible programs and those were of such small size that administrative drawbacks would have outweighed cost benefits. Others have avoided industrial revenue bonds because of a philosophical belief that commercial ventures should not be subsidized. One company that has not used IRB's is domiciled in a state that does not authorize them.

Future intentions pretty much parallel past experiences. Seventy-four participants expect to issue industrial revenue bonds during the next two years; seventeen do not; and twelve consider such issues possibilities, with issuance or nonissuance largely dependent upon opportunity; and four do not reveal their plans.

Recommendations

As the volume of industrial revenue bonds has risen, so also has the controversy surrounding their appropriateness. On the one hand, advocates see these issues making worthwhile contributions to business expansion and job creation and urge a continuance of the status quo. On the other, adversaries believe that, in many cases, IRB's provide discount financing for dubious projects at the expense of all taxpayers; they seek Congressional reform. Although Table 4 shows that most survey respondents expressing a view think the use of IRB's should be promoted, it also indicates that a significant minority hold opposite, or diverging, opinions.

Many executives who favor the encouragement of IRB financing believe such issues provide benefits not only for companies but also for communities by lending support to marginal projects that would not be implemented if conventional financing was required. Others think IRB's appropriate for pollution control and other public welfare projects that offer little, if any, profit potential. Still other proponents maintain that IRB financing should be further encouraged by upping the existing $10 million limit on eligible projects.

Some of those calling for restraint seek to eliminate what they consider abuses—the employment of IRB's for the construction of hamburger stands, bookstores and the like, for example. And others would like to see regulations covering the use of IRB's tightened because of what they perceive to be their deleterious effects: federal grants to private enterprises, restrictions on the free flow of funds in capital markets, and imposition of higher costs on "legitimate" tax-exempt issues, such as school-bond offerings.

Respondents who believe the use of IRB's should be both encouraged and constrained, for the most part support them for manufacturing facilities in depressed areas, but oppose other applications especially in the retail and service fields. Those who hold IRB financing should neither be encouraged nor restrained, do so out of the conviction that it is best to leave well enough alone.

Table 4: Participants' Recommendations Regarding IRB Use

Suggested Action	*Number of Mentions*
Encourage issuance	53
Constrain issuance	20
Both encourage and constrain issuance	12
Neither encourage nor constrain issuance	5
No opinion	7
No response	10
Total mentions	107

Following are some typical statements from the various camps:

> "As the use of industrial revenue-bond financing can represent an attractive opportunity to business as well as afford localities the opportunity to encourage business investment in accordance with their needs and objectives, its employment as a financing mechanism should probably be encouraged rather than constrained."
>
> Chief financial officer, a manufacturing company

* * *

> "Use of IDB's should be constrained since they obviously have an impact upon the revenue needs of the Federal Government. The abuse of such instruments and the related tax avoidance could, in the long run, be detrimental to the national economy."
>
> Chief financial officer, a utility company

* * *

> "Use of the instruments in conformity with their original objectives should be encouraged. Abuses of industrial revenue-bond financing, such as those that have been discussed in some detail recently, should be constrained."
>
> Treasurer, a manufacturing company

* * *

> "The use of industrial-revenue bonds should be neither encouraged nor constrained. Encouragement can lead to abuses resulting in the opportunity to use these bonds being taken away from everyone. Constraint can increase the already high level of red tape and bureaucratic procedure involved in the issuance of the bonds. Constraint can also limit the economic-development aspects of industrial-revenue bonds, thus preventing worthwhile projects from being undertaken."
>
> Treasury official, a manufacturing company

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Research Bulletin

Experience with Inflation Accounting in Annual Reports

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and Accounting Research

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Introduction

Accounting, perhaps more than any other business discipline, is governed by "conventions," that is, generally accepted ways of doing things. One of the most fundamental accounting conventions is the cost principle, which states: "Cost (i.e., the resources given up in the acquisition of other goods and services) is the appropriate basis for initial recording and subsequent accounting for assets, liabilities, revenues and expenses."[1]

The significance of this cost principle is that the monetary amount at which a transaction or event is initially recorded in a company's accounts becomes the reported value of that transaction or event as long as it remains in the company's records, regardless of changes that may take place in the purchasing power of the monetary unit over time. In periods when the monetary unit is relatively stable, the cost principle works quite well in corporate financial reporting, because historical cost has some very reassuring qualities. It is, for example, a hard fact that is easily verifiable. But the monetary units of most nations have been anything but stable in the economic conditions prevailing in recent years. Even in the United States, long considered a bastion of currency stability, double-digit rates of inflation have been experienced.

The reality of inflation has had a wrenching effect on the thinking of both the producers (accountants) and consumers (investors) of financial information. On the one hand, there is the disquieting realization that, as inflation continues, financial reports based on the convention of historical costs are becoming less and less meaningful for economic decision making. On the other hand, there is a strong reluctance to abandon the firm base of historical cost because of the justifiable fear that such a departure would undermine the credibility of accounting and would further aggravate the difficulty that many people already experience in trying to understand financial statements.

The accounting rule-making agencies in the United States have wrestled for many years with the problem of inflation in accounting and the subject has been a source of continuing debate, study and experimentation ever since the end of World War II. Finally, in 1976, the Securities and Exchange Commission grasped the bull by the horns and decreed that some large corporations had to inform readers of their financial reports of certain of the effects of inflation. The SEC's ruling met with much adverse criticism by preparers and did not generate much enthusiasm from the public.

Three years later, in the Fall of 1979, the Financial Accounting Standards Board, the rule-making agency of the private sector, released its Statement No. 33, "Financial Reporting and Changing Prices," commonly referred to as "FAS 33."[2] Actually, FAS 33 applies only to a relatively small number of large corporations: Only those firms with assets totaling more than $1 billion, or whose inventories and property, plant and equipment (before deducting accumulated depreciation) amount to more than $125 million are required to comply. These size limitations are somewhat comparable to the SEC's 1976 requirement, which was withdrawn when FAS 33 went into full effect.

FAS 33 represented a significant departure from earlier official thinking in accounting because, for the first time, it permitted a departure from the historical cost principle in corporate financial reporting. The FASB decreed that certain inflation-adjusted data entering into the computation of net income had to be presented as *supplemental* disclosures in the annual stockholders' reports of the affected corporations. Furthermore, the FASB required the inflation-adjusted data to be prepared on two bases: constant dollars and current costs.[3] (See box on p. 5.)

An important provision of FAS 33 is that the primary financial statements would continue to be prepared on the basis of conventional, historical costs. Thus, readers of annual reports would see disclosures of net income on three different bases of cost determination: historical costs, constant dollars, and current costs.

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[1] Glenn A. Welsch and Robert N. Anthony, *Fundamentals of Financial Accounting*, 3rd ed., Homewood, Illinois: Richard D. Irwin, Inc., 1981, p. 68.

[2] Statement of Financial Accounting Standards No. 33, "Financial Reporting and Changing Prices," September 1979. Copyright © Financial Accounting Standards Board of the Financial Accounting Foundation, High Ridge Park, Stamford, Connecticut 06905.

[3] For a more complete description of the requirements of FAS 33 and of the long series of events leading up to its release, see Francis J. Walsh, Jr., *Recognizing Inflation in Accounting*. Conference Board Report No. 783, 1980.

The Financial Accounting Standards Board further declared that FAS 33 was to be considered an experiment. Therefore, it encouraged preparers of financial statements to try different methods of computation and disclosure in order to develop the most effective presentations. The FASB promised to monitor progress with the FAS 33 experiment and to assist preparers in dealing with problems arising in practice. This it has done. And it has also invited the accounting profession, academic researchers, and the business community to conduct research into the effectiveness of FAS 33 and to develop recommendations for improving it.

This report is an attempt to gauge the reactions of a cross section of senior financial executives of large corporations, who have had some experience with the preparation and presentation of FAS 33 data. The Conference Board hopes that the insights gained from these executives will be helpful to the FASB in monitoring its experiment. Furthermore, it hopes that other executives will be encouraged to follow the lead of the survey participants by expressing their views and experiences either to other researchers or directly to the FASB.

This report is not intended to be a census of the attitudes of the entire business community toward inflation accounting. Rather, it was designed to obtain the reactions of a limited number of financial executives in a variety of industries whose firms are of sufficient size to come within the purview of FAS 33. While it is inevitable that many of those to whom the survey was directed are very large corporations, the sampling was designed to include a great many smaller companies at the lower end of the compliance spectrum. The Conference Board is grateful to the financial executives of the 90 companies responding to the questionnaire.

Perceived Reactions of Investors

The experience of the 90 companies participating in this survey indicates that FAS 33 data have had a rather slight influence so far on these companies' relationships with stockholders and other investors. The survey sought to discover not only whether companies have had any feedback from their stockholders about their inflation disclosures, but also whether professional security analysts have shown any interest.

Assessments of Stockholder Attitudes

Only eight of the ninety participating companies report that they have made any attempt to learn the attitudes of their stockholders and other investors toward the inflation disclosures in their annual reports. And most of the eight companies admit that these reactions have been rather negative.

One respondent bluntly characterizes the inflation disclosures as a waste of time and money because investors do not understand the data. This is an extreme view, however. A different reaction is reported by a respondent whose parent company is headquartered in the United Kingdom and is, therefore, subject to the current-cost conventions of the British accounting profession. The company's controller states that the investment community in London appears to have a favorable attitude toward inflation-adjusted financial reports. And he emphasizes that these presentations appear as the *primary* financial statements, rather than as the supplementary disclosures mandated in this country by FAS 33.

The overwhelming majority of responding companies have limited their presentations of inflation-adjusted data to that which is mandated by FAS 33. Only six companies have gone beyond the disclosures required in their annual reports. These few companies state that they have also given information about the effects of inflation in annual meeting presentations and post-meeting reports, quarterly reports to stockholders, and data supplied to financial analysts. One participant states that all of his company's external financial communications contain information about inflation.

Analysts' Inquiries

As the most sophisticated consumers of corporate financial information, professional security analysts might be expected to delve more deeply into corporate disclosures of inflationary effects than the average shareholder. The experience of the 90 survey participants, however, contradicts this expectation. Eighty-two of the respondents report that analysts do not ask for any additional inflation information beyond what is presented in compliance with FAS 33. And two financial executives added the comment that the analysts do not ask any questions about the FAS 33 data either.

The inflation-related items that they have asked about in the eight companies reporting such inquiries include:

- Effects of inflation on LIFO (last in, first out) inventory values;
- Effects on selling prices;
- Effects on raw materials costs;
- Effects on energy costs;

- Adjusted valuations of inventories, property, plant and equipment, and natural resources.

None of the survey respondents believes that the disclosures required by FAS 33 have had any effects on the company's ability to raise capital.

The Current-Cost and Constant-Dollar Methods of Calculating Inflation Adjustments

Current-Cost Accounting

FASB Statement No. 33 defines current-cost accounting as: "A method of measuring and reporting assets and expenses associated with the use or sale of assets, at their current cost or lower recoverable amount at the balance sheet date or at the date of use or sale."

Current-cost accounting, unlike constant-dollar accounting, makes no attempt to retain its tie to historical dollars. The philosophy of current-cost accounting, declares, in effect, that the dollars expended at some point in the past have no relevance in the preparation of a present-day financial statement during an inflationary period. According to this view, the only relevant numbers are the dollars that would be expended if an asset were to be acquired on the balance sheet date. Proponents of this view believe that any other method of valuation is not economically realistic during inflation.

Furthermore, current-cost accounting regards the effects of inflation on an enterprise not in terms of changes in the general price level, as in the case of constant-dollar accounting. Rather, it concentrates on the price-level changes of the specific commodities or assets with which the individual firm is concerned.

The current-cost technique requires the selection of appropriate methods of determining current costs of the items to be measured. FASB Statement No. 33 suggests internally or externally generated price indexes for the class of goods or services being measured; references to current invoice prices; vendors' price lists or other quotations or estimates; and standard manufacturing costs that reflect current costs.

Constant-Dollar Accounting

FASB Statement No. 33 defines constant-dollar accounting as: "A method of reporting financial statement elements in dollars each of which has the same (i.e., constant) general purchasing power. This method of accounting is often described as accounting in units of general purchasing power or as accounting in units of current purchasing power."

The important element in this definition for the purposes of this discussion is the concept of reporting in dollars of the same general purchasing power. Constant-dollar accounting differs fundamentally from the current-cost accounting approach in this emphasis on changes in general purchasing power, rather than on changes in prices of specific commodities or groups of commodities.

Perceived Reactions of Boards of Directors

FAS 33 disclosures have had a slightly more noticeable effect on boards of directors than they have had on external readers of financial reports, such as stockholders and security analysts, according to the surveyed financial executives. Even so, the great majority of participants report that many directors seem to be rather indifferent toward inflation-adjusted financial information.

Data Furnished to Directors

Boards of directors, of course, receive the same FAS 33 data each year that are included in annual reports to stockholders. But 23 of the participating companies provide a variety of additional information to their boards concerning inflation. Following are the kinds of information furnished:

- Planning data adjusted for anticipated inflation, including forecasts, long-range planning information, and budgets;
- Capital expenditure proposals adjusted for inflation;
- Comparison of FAS 33 data with those reported by competitors;
- Sales and other operating data adjusted for inflation, including division and subsidiary information;
- Quarterly financial reports containing FAS 33 adjustments;
- Restatement of income statements for the past five years.

Only eight of the survey respondents indicate that their boards of directors have asked for inflation-related information beyond that which is routinely supplied by company managements. The areas of concern expressed by these directors most frequently included sales, inventories and divisional performance.

Dividend Policies

Only five of the responding financial executives feel that FAS 33 information has had any effects on their companies' dividend policies. Those commenting on this question state that their boards of directors had considered the effects of inflation in their deliberations on dividend payments, and in the general management of retained earnings, long before FAS 33 data were available.

One executive adds, however, that the revelations of the FAS 33 computations served to reinforce his board's already restrained policy of dividend payouts. Another participant observes that his company's goals for the 1980's have been reconstituted in the light of inflationary conditions, and an important consideration is the effect of rising prices on the growth of dividends.

Only two executives believe that FAS 33 data have had any effects on the debt-equity mix in their corporate capital structures. One of these respondents feels that these disclosures have reduced borrowing capacity. The other believes that the disclosures have served to highlight the effects of inflation with a consequent influence on financing decisions. This participant adds that it is the reality of inflation, rather than the mere financial reporting of its effects, that really influences debt-equity decisions.

Reactions of Management

The 90 financial executives taking part in this survey went to considerable lengths to explain their own experiences with, and reactions to, FAS 33 disclosures. For the most part, they are able to do this from two points of view: first, as the corporate officers who are principally responsible for preparing their firms' periodic financial reports, with their accompanying FAS 33 disclosures; and, second, as informed consumers of financial statement information.

The principal points on which these executives were polled were:

- The areas of difficulty that they encountered, as preparers of financial statements, in complying with FAS 33 requirements;
- Their assessment of the parts of FAS 33 that need to be changed or improved;
- The extent to which inflation-adjusted data are used in their companies for internal management reporting purposes;
- Their attitudes toward increased disclosure of inflation-adjusted data to investors, specifically in interim or quarterly reports;
- Their overall assessment of the value of presenting inflation-adjusted information to investors.

Areas of Difficulty

Many of the accounting standards introduced during the past two decades have caused varying degrees of difficulty for the preparers of corporate financial statements. FAS 33 would have to rate among those that are inherently troublesome. As one example, many companies had to delve far back in their accounting records to unearth acquisition dates and costs for items that needed to be restated in terms of both constant dollars and current costs. Just the sheer volume of such work in large companies—even with the aid of computers—is a difficulty to be reckoned with.

Principal Areas of Difficulty in Complying with Requirements of FAS 33

Problems related to the current-cost method:	Number of Mentions
Computing values of natural resources and of plants, property and equipment, and related depreciation	49
Computing current-cost valuations for foreign subsidiaries	8
Developing indexes and methodology	7
Computing values of inventories and cost of goods sold	5
Problems related to the constant-dollar method:	
General objections to this method	3
Computing values of plants, property and equipment and related depreciation	2
Cost-of-goods-sold adjustments	2
General objection:	
Compliance with the standard is too costly and time-consuming	6

Only eight out of the ninety respondents report that they do not consider FAS 33 particularly difficult to comply with. Some of these companies are in industries where fixed assets and depreciation are less of a factor than in other lines of business. Two others state that the standard presents no insurmountable conceptual problems, but they nevertheless complain of the time-consuming features. All of the other survey participants declare that they found at least some of the requirements difficult to comply with.

As summarized in the accompanying box, reported difficulties in complying with FAS 33 because of the current-cost method outnumber those related to the constant-dollar method by almost ten-to-one. Within this broad category, the principal problems have to do with computing the values and related depreciation of natural resources and of plants, property and equipment. Forty-nine respondents point to this difficulty as their principal problem with the standard. For example, the vice president and controller of a communications equipment company states: "Determination of current-cost data for property, plant and equipment was costly and time-consuming, primarily because of decentralized record keeping, diversified nature of businesses, foreign operations, and highly subjective nature of the underlying assumptions."

Because only large corporations are presently required to comply with FAS 33, it is inevitable that many of them have substantial foreign operations. This complication adds further difficulties in the attempt to report on the current-cost basis. As the representative of an office equipment company puts it:

> "Internal manufacturing cycles make the determination of representative current costs difficult in a multiproduct environment. In addition, there is the problem of instructing, preparing and consolidating information from over 100 countries."

The current-cost method presents a major problem for the preparers of financial statements in that a method must be devised in each company for estimating the current costs of the items to be measured. FAS 33 points out various ways of accomplishing this task, for example, references to current invoice prices, vendors' price lists, or other quotations or estimates. When these are not available, the standard suggests the development of custom-tailored price indexes. A good many companies have chosen this alternative but it has proven to be costly. As the vice president of a metals company observes:

> "Many man-hours were spent attempting to determine the approach that would provide the most meaningful and reliable information. We ultimately decided to develop an internal index, which again required large amounts of time."

Summing up the problems encountered with the current-cost method, an executive of an oil field equipment company concludes:

> "Current-cost information was most difficult, although it is more meaningful than constant-dollar information. There is, therefore, a trade-off between relevance and effort."

As the box shows, only seven responding executives complain of difficulties with the constant-dollar approach to estimating the effects of inflation. Comments indicate that their objection is directed at the conceptual foundation of this method: that the historical cost values of all items to be restated respond equally to changes in the general price level. Critics of the constant-dollar approach say that this assumption is unrealistic. One executive also takes exception to the FAS 33 requirement that the Consumer Price Index be used to make constant-dollar adjustments. As he sees it: "The CPI has the advantage of being updated frequently, but it has very little to do with the movements of prices in our lines of business."

Shortcomings in FAS 33 Most Frequently Reported by Responding Executives

	Number of Mentions
Inappropriateness of the Consumer Price Index	9
Lack of recognition of technological advances in production facilities; also, facilities are seldom replaced "in kind"	8
No restatement of income tax expense is permitted	8
Insufficient recognition of holding, or purchasing power, gains and losses	7
Partial, rather than complete, adjustment of financial statement items	5
Ignores variations among different industries	3
Effects of inflation on cash flow are not clearly disclosed	3
No recognition is given to the anti-inflation measures adopted by management (e.g., in product pricing and improvements in efficiency)	3
Miscellaneous	11

Other difficulties mentioned by a few survey participants are:

- Educating the accounting staff to do the required computations;
- Explaining the data to readers of financial reports, especially in light of the rather confusing terminology employed;
- Computing holding gains.

Portions of the Standard that Need Improvement

Above and beyond the difficulties they encountered in complying with FAS 33, 57 of the 90 participating financial executives point to what they consider to be shortcomings in the standard as it is presently constituted. A variety of such comments were offered and those most frequently cited are summarized in the accompanying box.

A requirement of the constant-dollar method, one of the two approaches to computing inflation adjustments mandated by FAS 33, is to revalue certain financial statement items in terms of the Consumer Price Index

(CPI) for all urban consumers, published by the Bureau of Labor Statistics of the U.S. Department of Labor. The designation of this index is criticized by one in ten of the executives taking part in the survey. A number of respondents object to the constant-dollar method as a whole because they believe it is unrealistic to assume that the prices of all commodities move up or down at the same rate—the underlying postulate of the constant-dollar method. But, leaving this general objection aside, some feel that a consumer price index is by definition unsuitable as a measure of inflation for their businesses and that it distorts the results of attempts to quantify the effects of inflation on their companies.

Another frequently voiced criticism is that the inflation-adjusted balances of fixed asset items under the current-cost method often do not give adequate recognition to technological changes and improvements. Several executives make the point that facilities being phased out are seldom replaced in kind. To assume that they are, they say, distorts the recomputation of depreciation expense and net income for their companies.

Income tax expense is an important element in the determination of net income. And FAS 33 requires that this expense be set forth in the schedule, Statement of Net Income From Continuing Operations Adjusted for Changing Prices, under all three bases of reporting (historical costs, constant dollars, and current costs). Because inflation adjustments have not been recognized by the Internal Revenue Service in determining tax bills, the provision for income taxes is reported as the same amount under all three bases. Some executives object to this treatment on the grounds that the inflation-adjusted statements are only supplementary disclosures anyway, and a truer picture of the effects of inflation might be obtained if tax liabilities were restated in line with the restated net incomes.

Seven financial executives also are critical of the way they are required to report the purchasing power gain or loss on net monetary items. Several suggest that this is an important element of information that deserves greater recognition than FAS 33 accords it. And another five participants object to FAS 33's approach of applying inflation adjustments to only a few critical elements of financial statements. This group believes that restatement of all items is desirable.

A few other executives point out that FAS 33 cannot reflect variations among different industries in terms of the different effects of inflation on them; also, the effects of inflation on cash flow are not clearly set forth. And no recognition is given to the anti-inflation measures adopted by management.

A number of other shortcomings of FAS 33, reported by a few of the surveyed executives, include the following:

- Concurrent restatement under two approaches (constant dollar and current cost) is confusing and time consuming;
- The current-cost method overstates the effects of inflation on net income;
- The standard is too broad in scope and too much information is buried;
- Approach adopted by the accounting profession in the United Kingdom should be considered in the United States;
- Effects of inflation on long-term procurement contracts should be disclosed;
- Effects of inflation on foreign operations are not disclosed;
- The current-cost method involves too much subjective judgment;
- Interest costs are not adequately treated;
- The disclosures should distinguish between effects of inflation on operating decisions as against those affecting financing decisions.

Internal Uses of Inflation-Adjusted Data

The disclosure provisions of FAS 33 apply only to the annual stockholders' reports of a limited number of large, listed corporations. Nevertheless, a few firms have gone a step beyond this minimum requirement and have begun to use inflation-adjusted data for internal management reporting purposes.[4]

Only twenty-five of the ninety executives taking part in this survey report that their firms use such information internally. The types of internal applications listed by these executives follow:

Type of Application	Number of Mentions
Income statement and balance sheet information, including ratios, by segments, product lines, or divisions	12
Capital expenditure proposals	7
Long-range forecasts and plans	5
Pricing proposals and decisions	3
Inventory information	3
Annual budget information	2
Adoption of LIFO	2
Sales analysis	2
Quarterly income statement and balance sheets for the company as a whole	2
Analysis of acquisition candidates; and analysis of competitors	1 each

Two respondents emphasize that they use only current-cost data in their internal applications. Another states that his firm's decision to supply inflation-adjusted data internally was not really influenced by FAS 33; they were doing it anyway.

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[4] See, for example: Allen H. Seed, III, *The Impact of Inflation on Internal Planning and Control.* New York: National Association of Accountants, 1981; Francis J. Walsh, Jr., *Reporting Information to Management Under Conditions of Inflation: Report on a Forum.* Conference Board, RB No. 104, 1981.

Internal uses of inflation information are presently in a highly evolutionary state. And although such usage is rather limited so far, there are a number of companies in various stages of developing this information. The following statement by the chief financial officer of a building products company is an example:

"Many of the company's divisions are already using various techniques designed to measure and report the effects of inflation. In addition, we have recently organized a task force, comprised of representatives of various functional areas within the company, that has been charged with the responsibility for identifying those measurement and reporting techniques that will be most useful on a company wide basis in helping managers at all levels in dealing with inflation. The specific method by which inflation-adjusted financial data will be incorporated in the company's internal management information and reporting system will be contingent on the findings of the task force."

Attitudes Toward Increased Public Disclosure

The executives responding to the Board's inquiry are overwhelmingly opposed to the idea of extending inflation disclosures to interim or quarterly reports to stockholders and to the general public. Only four out of ninety see any merit in this. Their objections can be summarized very briefly as follows:

- The cost of presenting inflation-adjusted data on an interim basis would far exceed any benefits;
- Such information is meaningless for short time periods;
- The annual disclosures are confusing to many stockholders, and interim information would only make the situation worse;
- Few investors have shown any interest in inflation information, even on an annual basis.

Two of the four executives favoring interim disclosures do so on the ground that historical cost information has become meaningless.

Overall Assessment

Despite difficulties encountered in complying with its provisions, and their criticisms of its shortcomings, a majority of the 90 executives participating in this survey believe that the FAS 33 experiment is worthwhile. And they support the Financial Accounting Standards Board's efforts to bring the effects of inflation to the attention of the general public.

The responses to the question: "Based on your experience with FAS 33 so far, do you believe it is worthwhile to present inflation-adjusted financial information to investors?" are shown below:

	Number	Percent of Total
Yes	42	47%
No	29	32
Undecided	19	21
Totals	90	100%

The executives offered a variety of reasons in support of their opinions. Those who believe the FAS 33 effort is worthwhile most often cite the need to increase the awareness of the investing public and of government officials to the "real" levels of taxation and dividend payouts. And, in a related vein, they point out that FAS 33 is a step in the educational process of showing what inflation does to capital formation, and of the need to retain earnings to finance future growth. Several participants make the point that these benefits are so important that it is wasteful to argue over which inflation measurement method is to be used—the important thing is to get the message across.

Other reasons in support of the "yes" votes are:

- The data improve comparability among firms;
- The data assess ability to survive or expand;
- Management is in a better position to measure inflationary effects than analysts or individual investors;
- Historical cost data are no longer relevant;
- The adjusted data help bring book values and stock prices more closely into agreement;
- The data assist investors to assess cash flows and other trends.

The nearly one-third of the responding executives who do not believe it is worthwhile to present inflation-adjusted financial information to investors also give a variety of reasons for their position. The principal ones are that the data are too vague, too subjective, and too confusing—and, therefore, are beyond the understanding of most investors. They also point out that, in their experience, there is very little interest in the information on the part of investors, possibly because they have grown accustomed to discounting the effects of inflation when reading conventional financial statements. In sum, the adjusted data have limited value in making investment decisions and the cost of producing the information far outweighs the benefits.

Other reasons given in support of their "no" votes are:

- The CPI index distorts results;
- Inflation accounting cannot solve the basic problem of eliminating inflation from the economy;
- It is impossible to segregate the effects of past inflation because prices often change for reasons other than inflation;

- The FASB should have worked out the problems of inflation accounting, including a meaningful reporting format, before issuing the standard.

Several executives, while supporting the concept of reporting the effects of inflation, believe it would be better if company managements were permitted to choose their own methods for doing so. In particular, these participants think that a shorter presentation than the one that is presently required would be preferable.

Summing up the majority opinion on the overall worth of the FAS 33 experiment, an executive of an electrical products company makes the following observation:

"The FASB is on the right track. Inflation has a significant impact on business. Because it is complicated and difficult to understand is not justification for not trying to explain its effects. The FASB approach of disclosing inflation-adjusted data on an experimental basis is the correct approach. As these disclosures are prepared and made, both preparers and users will begin to develop an understanding of the effects of inflation, and sound accounting and reporting of inflation-adjusted data will evolve."

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Research Bulletin

U.S. Regional Outlook 1982-1983

Summary of an April 1982
Meeting of The Conference
Board's Regional Economic
Forum

The Conference Board

number 118

BEST AVAILABLE COPY

The Conference Board's fourth annual economic forum met at the beginning of April, gathering eight experts from around the country. The Forum's deliberations are summarized in this report.

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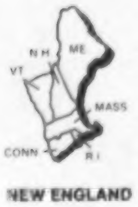
HIGHLIGHTS

The 1981-1982 slump is being felt in New England. However, the region has low concentrations of the heavy durables manufacturing that is so severely affected by the recession. Indeed, durables manufacturing is a plus for the region because of the strength not only of high-technology industries but of others such as defense-oriented aircraft and shipbuilding. Employment growth in other private industries is generally slow and government employment is falling. Provided the national economy recovers, however, New England can look forward to sustained although moderate growth beyond 1982.



WISC
MICH
PENN
OHIO
ILL
IND
INDUSTRIAL
HEARTLAND

The Industrial Heartland is badly depressed and will remain weak until interest rates come down and money flows easily once again. The end of inventory liquidation and the July 1 personal tax cuts will help to revive production of consumer durables, but the ongoing erosion of corporate profits will sharply curb production of machinery and equipment for business investment. However, if interest rates come down and stay down, the cyclical rebound in 1983 will be far stronger in the Heartland than nationally.

The Mid-Atlantic economy should soon begin a modest advance roughly in line with that anticipated for the national economy. Recovery will be slow because real interest rates are expected to decline only slowly, but the recent good performance of the region in the face of adverse national conditions augurs well. A large part of the recent good showing reflects employment strength in New York City, particularly in construction, services and finance-insurance. The region's long secular decline seems to be over and there will be less drag on growth in the 1980's than there was in the 1970's.

N Y
N J
MID-ATLANTIC

W VA
DEL
MD
VA
KY
N C
TENN
S C
MISS
ALA
GA
FLA
SOUTHEAST

The recession's impact is less severe in the Southeast than in some other regions, but the slump is certainly being felt. Although there is considerable distress in the region's airline, auto, construction and textile industries, the Southeast continues to benefit from its orientation toward service industries and light rather than heavy manufacturing. Assuming that inflation and interest rates decline, prospects look good for a modest recovery, regionally and nationally, beginning by late this year.

A NOTE ABOUT REGIONS

The definitions established by the Census Bureau are probably the most familiar to users of regional data, and they are used here with only one amendment—a different treatment of Pennsylvania. The relationship of The Conference Board Forum's regions to the Census Bureau's regional divisions is as follows: New England = New England; Mid-Atlantic = Middle Atlantic less Pennsylvania; Industrial Heartland = EastNorth Central plus Pennsylvania; Southeast = South Atlantic plus East South Central; Breadbasket = West North Central; Southwest = West Central; Mountain = Mountain; Pacific = Pacific.

Although 1981 began with some optimism over prospects for stronger farm prices, the optimism was largely unfounded. Farmers experienced the adverse price impact of large supplies of some crops. More importantly, the weakness of the U.S. economy and the economies of our trading partners made for sluggish end-market demand for farm products. The outlook is one of continued weakness in farm prices in 1982, and the third consecutive disappointing year for farm income.

ND
MINN
SD
IOWA
NEB
KAN
MO

AMERICA'S BREADBASKET

OKLA
ARK
TEX
LA

SOUTHWEST

The Southwest has been affected by the 1981-1982 recession, but less severely than the nation as a whole. Texas and Oklahoma continued to benefit in 1981 from accelerated oil and gas drilling and exploration, but such activity seems to have peaked and to be declining this year. The Arkansas economy is hurt by its important concentration of housing-related manufacturing and its depressed agricultural sector, while in Louisiana the older parts of the petroleum industry are adjusting downward.

Falling oil prices, declining government employment, and problems in the high-technology sector related to recession and foreign competition are combining to cause some doubt about the usual rosy forecast for the Mountain region. The most crucial variable in the 1982-1983 outlook is the price of oil, for substantial further declines would have a large negative impact on the region. Beyond the near term, however, it is difficult to envision any scenario in which the region does not outperform the nation.

MONT
IDAHO
WYO
NEV
UTAH
COLO
ARIZ
N MEX

MOUNTAIN STATES

ALASKA
WASH
ORE
CALIF
HAWAII

PACIFIC

Business conditions continue to weaken in the Pacific region as the recession's impact spreads to a broader group of industries. Unemployment is highest in the lumber regions, but job growth in most other industries is very disappointing. Conditions will be quite poor for much of this year, but the longer run outlook is brightened by the region's orientation toward the fast-growth industries of the future—aerospace, electronics, high-technology research, specialized agriculture, services and foreign trade.

The Recession is Pervasive— An Overview

Lora S. Collins
The Conference Board

The meeting of the Regional Economic Forum in the Spring of 1982 was not a cheerful event. Forum participants look for only a modest upturn in economic activity in the second half of 1982, and expect this year to end with the economy operating at a level virtually unchanged from that at the end of 1979. This three-year period of stagnation is in sharp contrast to the average annual growth of more than 4 1/2 percent from 1975 to 1979. Not only do the Forum participants see no prospect of rapid cyclical rebound this year, they think it possible that economic growth will be subdued into 1983 and even beyond. The key to all this is the commitment of monetary policy to wringing inflation out of the U.S. economy. As Forum participants noted, the anti-inflation struggle is proving to be a war of attrition, not a blitzkrieg; one said that we are experiencing not a business cycle but a siege.

National economic conditions are the most important factor influencing any region's economy. In this sense, no region is recession-proof. In fast-growth regions, a national recession manifests itself as a slowdown of growth, which certainly constitutes a sharp deviation from a fast-growth region's norm. Chart 1 shows the similarity of cyclical patterns in the nation's regions. The sense of the latest Regional Forum is that the entire economy is being repressed, with unmistakable impacts on every region.

Lora S. Collins

One participant suggested that certain structural forces are at work to depress economic activity in 1982, in addition to purely cyclical phenomena. Foremost among the structural forces is the determinedly anti-inflationary stance of the Federal Reserve, leading to persistent financial market uneasiness and extraordinarily high interest rates. The Forum felt that the depressant impact of monetary policy could be called a structural factor because it diverges so much from the past path of monetary policy, and is having such an unusually repressive effect on all credit-sensitive sectors. Other structual depressant factors mentioned are: (1) the straitened circumstances of state and local governments, which have ceased to be a growth sector as a consequence of tax limitation movements and reduced federal aid; (2) the deregulation movement, which has sharply changed the operating environment of industries such as trucking, airlines and finance; (3) the drop in energy prices, which has had a major depressing effect on exploration and production. The Forum was not sure that the energy price situation is permanent enough to be called a "structural"

Chart 1: Year-to-Year Percent Change in Per Capita Personal Income

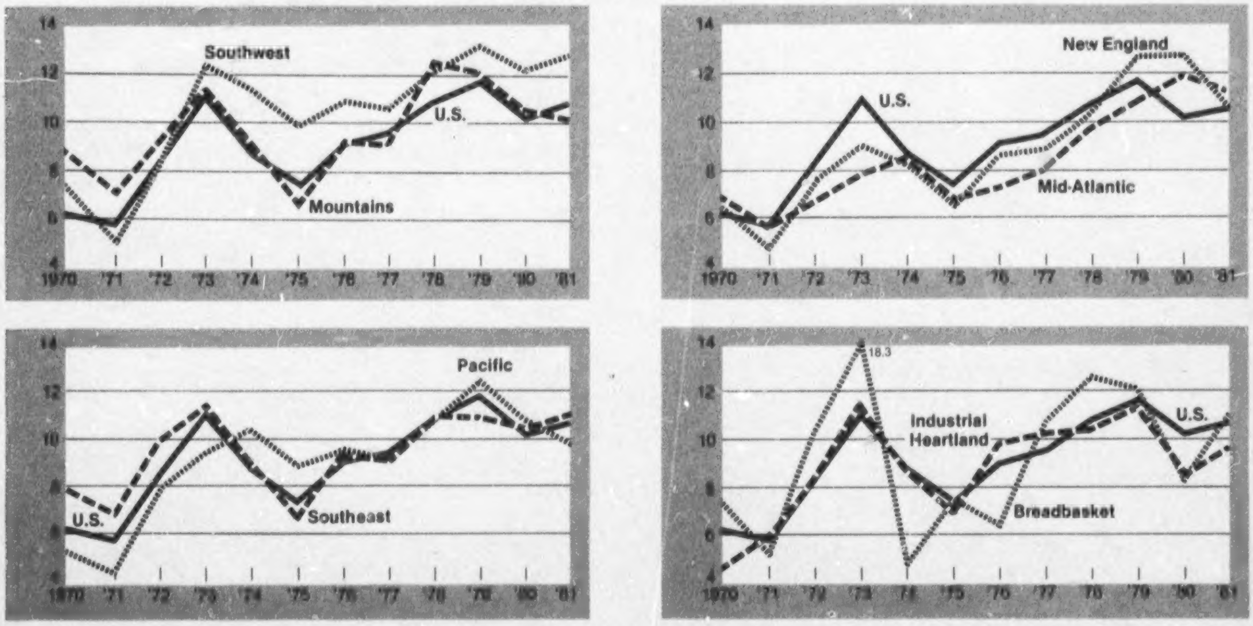


Table 1: Percent Composition of Employee and Proprietors' Income[1]

	Agri-Culture	Con-struction	Mining	Non-durables Mfg.	Lumber & Furniture	Mach'y & Instru-ments	Metals	Motor Vehicles	Other Durables Mfg.	Federal Gov't	State & Local Gov't	All Other[2]
New England	1.0	4.6	0.1	9.2	0.9	11.6	4.4	0.3	5.5	3.6	10.5	48.2
Industrial Heartland	2.0	5.4	1.0	9.3	0.9	9.5	8.4	4.9	2.8	2.7	9.8	43.4
Mid-Atlantic	0.8	3.8	0.2	10.9	0.4	8.0	2.7	0.8	2.2	3.1	12.1	55.0
Southeast.............	2.8	6.1	1.8	11.7	1.7	3.9	2.8	0.7	2.2	9.6	11.2	45.6
Breadbasket...........	6.6	6.3	1.2	8.8	0.8	6.4	1.9	1.1	4.4	4.0	10.6	48.0
Southwest	3.4	8.3	6.3	8.3	1.0	4.8	2.8	0.4	1.5	5.1	9.9	47.1
Mountain	3.6	8.6	5.4	4.0	1.3	4.2	2.1	0.2	2.3	7.0	12.0	49.2
Pacific................	3.5	6.4	0.6	6.1	2.0	6.2	2.4	0.5	4.6	[illegible]	11.9	49.8

[1] Based on average of 1979 and 1980 data.

[2] Finance, insurance, real estate, trade, transportation, communication, utilities, services.

change, but felt that it certainly comes close to qualifying. The discussion at the meeting suggested that the augmenting of normal cyclical forces by these structural factors explains why the 1981-1982 slump is felt to be so pervasive.

It goes without saying that the Industrial Heartland is hurting. Homebuilding everywhere is in greater trouble than usual in a cyclical slump, accompanied by depressed conditions in lumber, furniture and household durables. Office construction, on the contrary, is booming everywhere, but there are concerns about overbuilding. Construction is a relatively more important industry in fast-growth areas, and thus a relatively important factor in their experiencing of the current recession. The troubled lumber industry is concentrated in the Pacific and Southeast regions, and the latter also has considerable furniture and appliance manufacturing.

The problems of state and local governments are also a factor in every region, but perhaps most notably on the west coast where rapid growth of this sector had seemed a permanent fact of the employment situation. With respect to deregulation, the Southeast and Pacific regions were mentioned as particularly affected by the condition of the airlines—the former as a region where airlines are an important employer, the latter as an aircraft producer. Declining prices and excess capacity are causing a shakeout from the previous boom in oil exploration and this is a negative factor in the Southwest and Mountain regions.

The agricultural situation has not been counted as a "structural" depressant, but it certainly is reinforcing the business cycle downturn. Agriculture is in difficulty everywhere, partly for reasons of nature but partly also because of the state of the economy—specifically, weak final markets and high interest rates.

The relative bright spot is the northeastern corner of the country—New England and the Mid-Atlantic. Part of the reason is industry mix: These regions have low concentrations of the industries that are suffering the worst slumps and high concentrations of those that are not seriously depressed, such as a broad range of services and, in New England, defense and high-technology manufacturing. Table 1 shows New England having the nation's highest concentration in machinery and instruments manufacturing. To a considerable extent, this reflects "high-tech" industries, although it is not possible in these data to separate them from the more mundane. New England's high concentration in "other durables" includes defense-related aerospace and shipbuilding industries. In addition to industry mix, there is also the fact that New England and the Mid-Atlantic states had their fiscal crises in the mid-1970's and have already adjusted to the slower growth of state and local government that is currently a substantial negative force elsewhere.

A year ago, the Forum focused on longer run prospects. The focus this year was exactly the opposite, that is, it centered on the pervasiveness and severity of the 1981-1982 slump. There was even some discussion of the possibility that the recession could cumulate into a more

Table 2: Regions in Which Selected Industries are Most Important, as Measured by Percentage of Employee and Proprietors' Income[3]

	Industry's Percent of Income in Region(s) where Most Important	Industry's Percent of Income in Rest of United States
Agriculture	BB 6.6	2.5
Construction	SW 8.3, MTN 8.6	5.5
Oil & gas mining......	SW 6.0, MTN 2.0	0.2
Textiles & apparel	SE 3.9	1.0
Lumber & furniture ...	PAC 2.0, SE 1.7	0.8
Machinery & Instruments	NE 11.6	6.6
Metals..............	IH 8.4	2.7
Motor vehicles	IH 4.9	0.6

[3] Based on average of 1979 and 1980 data.

serious decline. Implicit in the Forum proceedings is a view that the 1980's will be a period of favorable economic conditions in all regions, if we succeed in stimulating capital formation. However, there was a clear sentiment that the path from here to there is dark, bumpy and not guaranteed.

New England

Frederick Breimyer

First National Bank of Boston

Frederick Breimyer

Much has been written on the improved economic health of New England, so much so that an aura of invulnerability is often attributed to the region. A year or so ago, one heard that New England was recession-proof; today we hear it is recession-resistant. In fact, the 1981-1982 recession has come to New England.

From the outside, New England is often regarded as relatively homogeneous and developed. In fact, the three northern states of Maine, New Hampshire, and Vermont historically have been slow to develop and, where once developed, have lost much of the manufacturing base without adequate replacement. In the 1970's, this began to change markedly as all three states experienced new growth around high-technology industries.[4] In Vermont, the growth was located mostly near Burlington, while in Maine and New Hampshire growth was located near their southern borders.

Massachusetts served as the wellspring for much of the high-technology growth within New England and remains the dominant state within the region. It accounts for virtually one-half of New England's total nonagricultural employment and has the most extensive high-technology and service sectors. Connecticut, the other large, economically diversified state, is well favored. Its per capita income is the highest of any state in the country, save Alaska, and almost 50 percent higher than that of Maine or Vermont. Connecticut manufacturing is concentrated in transportation equipment and is highly sensitive to military contracts. Rhode Island is also highly industrialized, but much more along traditional New England lines, with heavy concentrations in textiles and jewelry. The state is much less closely tied to military spending than it was during the early 1970's.

The hallmark of New England is not homogeneity, but diversity. The aging and decline of long-standing industries is balanced by the emergence and growth of new ones. The good news about New England is that this transition continues. It is the process of regeneration which makes the New England economy viable, rather than any particular economic environment. Nonetheless, today's economic environment is having a negative impact. The long-term slide in nondurables manufacturing employment, which was arrested temporarily following the recession of 1974-1975, has resumed. However, what marks the current period is not so much the severity of job losses as the wide diffusion of these losses across New England's industries and states. The only nondurables industries in New England experiencing meaningful growth in employment since late 1978 have been printing and publishing and, to a lesser degree, the related paper and paper products industries. Relative to national trends, nondurables employment in New England is weak, although less strikingly so than it was during the 1960's and early 1970's.

The region's counterweight is durable goods manufacturing, featuring a concentration of high-technology industries and underrepresentation of automotive manufacturing. Durable goods employment in New England has risen by almost one-quarter since 1975, and about 70 percent of that gain has occurred in high technology manufacturing. Durable goods employment outside of high-technology also has proven resilient in the face of recession. This has been particularly true—at least until very recently—of the transportation equipment industry in Connecticut with its emphasis on aircraft and shipbuilding. Wood and furniture manufacturers have suffered major cutbacks in employment, however.

New England benefits from a growing service sector, most of which is located in Massachusetts. Within Massachusetts, about one-half of the service sector is dedicated to health and education. Growth of the service sector in New England has matched the national average increase, but other private industries have not kept up with their national counterparts. New England is not a transportation or distribution center and it is not oriented toward construction although commercial development

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[4] High-technology manufacturing is defined here broadly to include all electrical and nonelectrical equipment plus scientific instruments.

Table 3: Employment Growth Rates and Percent Composition—New England and United States

	Employment Growth(%)				*Composition*	
	1975-1979		*1979-1981*		*In 1981 (%)*	
	NE	*US*	*NE*	*US*	*NE*	*US*
Manufacturing	17.1	14.9	—0.9	—3.7	27.5	22.1
Nondurable goods	8.0	8.5	—4.5	—1.9	10.0	8.9
Durable goods	23.3	19.5	1.2	—4.9	17.5	13.3
High technology	29.9	22.8	4.2	1.4	9.4	5.9
Nonmanufacturing	15.4	17.3	3.2	3.6	72.5	77.9
Government	10.7	8.6	—3.5	0.7	14.6	17.5
Services	23.1	23.2	9.9	8.7	22.8	20.3
Trade	14.8	18.3	2.1	2.7	21.4	22.8
Other	11.0	19.6	2.2	2.4	13.6	17.4
Total Nonagricultural	15.9	16.7	2.0	1.9	100.0	100.0

has done well in recent years. It does, however, have a number of prestigious financial firms. Taken together, the growth of employment in these sectors—trade, construction, finance, and transportation and public utilities—has been slow. Also, government employment has not increased in any state since 1978, and in Massachusetts the number of state and local workers has fallen sharply owing to property tax limitations embodied in Proposition 2 1/2 and to state budgetary cutbacks.

The outlook for New England is more bright than bleak, but the region is not immune from cyclical downturns. Nondurables employment is likely to continue to underperform the national pace. Hence, prolongation of recession raises the specter of enduring hardship. Shoe and textile companies still close in New England, and when they do, they leave an older and largely immobile work force with few immediate opportunities. High-technology industry views the recession more as a temporary interruption of growth than a serious challenge. The question of the industry's viability arises much more in the context of long-term international competitiveness. In this regard, a First National Bank of Boston survey of capital spending in New England shows high-technology firms continuing to support future expansion. Still, the recession has caused employment growth to stagnate as new orders and cash flow have been crimped. Hiring is being cut back even among the industry's elite, and some layoffs industrywide are foreseeable.

If nondurables employment is likely to continue eroding and durable goods employment is to remain on "hold" with prospects for minor job losses, so, too, gains in service sector employment are likely to slow. There has been little direct evidence from employment data so far, but health and education employment is vulnerable to reductions contained in the Reagan budget. The number of government workers in the region is expected to decline. Although the job cutbacks stemming from Proposition 2 1/2 in Massachusetts are beginning to abate, the loss of federal grants-in-aid will keep state and local governments under budgetary pressure not only this year but for the foreseeable future. Other nonmanufacturing jobs are expected to expand, but very slowly. The upturn in the national economy expected at midyear should boost growth in trade and construction. Employment growth in finance has been only slightly affected by the recession so far, but the distress of thrift institutions could seriously reverse growth trends now in place. Employment in transportation and public utilities should revive with a lag, so the improvement here is expected to occur in 1983.

Finally, it should be recognized that if New England characteristically grows less rapidly than the nation, it can also do with less growth. The labor force expands much less rapidly than elsewhere, and New England now enjoys a legacy of a relatively low unemployment rate stemming from the late 1970's. Last year, New England's unemployment rate averaged 6.4 percent versus 7.6 percent nationally, and by the end of the year the region's unemployment rate stood a full 2 percentage points below the national level. This suggests, if it does not demonstrate, that economic success can come not only through the dynamics of capitalistic regeneration aided by public policies, but also by having restrained growth in population.

"The Industrial Heartland"

Elizabeth A. Bossong

United States Steel Corporation

Elizabeth A. Bossong

The Heartland has had a massive coronary, and no amount of intensive care will relieve it until interest rates come down and money flows easily once again through the key arteries of the industrial sector.

In industry after industry, one must search back over 20 years or more to find parallels with current operating levels. The steel industry operated at 60 percent of capability in the first quarter of 1982, falling further to the low 50's during April. Auto production was at a 4-million-unit seasonally adjusted annual rate in the first quarter, as stocks were reduced, while domestic sales were at a somewhat higher but still depressed 6-million-unit rate, aided by rebates.

Layoffs have been widespread among metalworking companies and producers of construction equipment and appliances. Freight car orders and deliveries are at a virtual standstill, jobless rates in industrial centers are double the national averages, and—reflecting the sharp reduction in business activity in the central core of the nation—there has been a widespread collapse in construction.

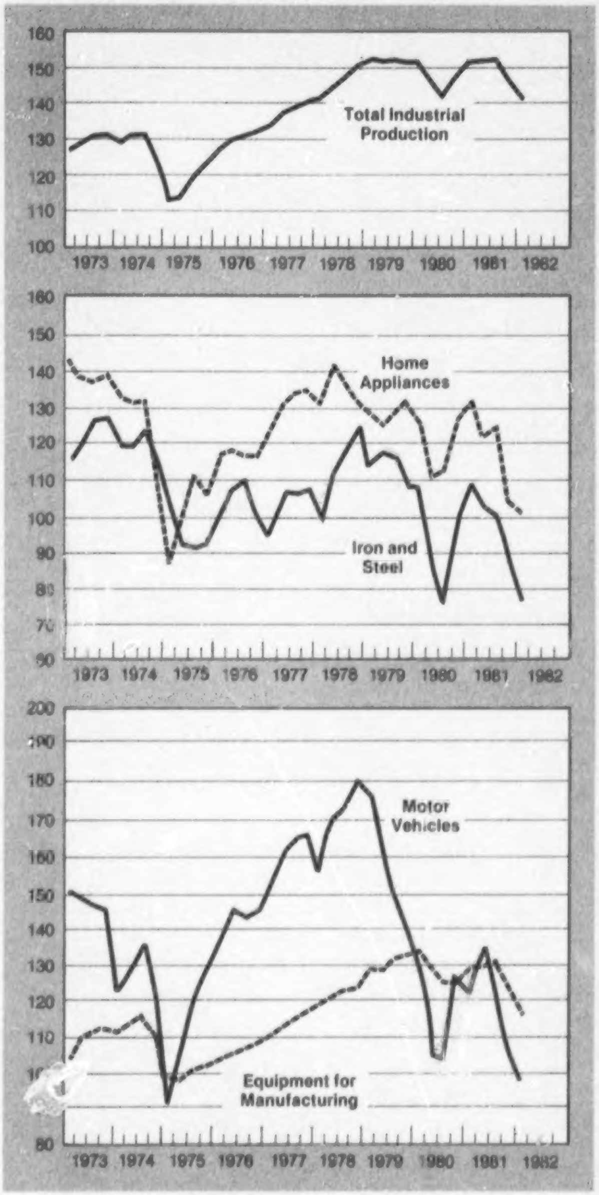
Nationwide, as housing starts declined from 1.7 million units in 1979 to 1.1 million in 1981, housing contract awards in current dollars fell by 22 percent; the Heartland's share of that sagging total fell from 20 percent in 1979 to 15.5 percent in 1981, and the share was still dropping in the early months of 1982. Similarly, contract awards for nonresidential building (in millions of square feet) dropped 15 percent between 1979 and 1981 nationwide; in the Heartland, the decline was 36 percent.

Any assessment of the key manufacturing sectors provides grim reading. Car production this year may not match last year's depressed total of 6.25 million, and will be roughly one-third below 1977 and 1978 totals. Truck output will be marginally higher than in 1980-1981 but not much more than half the 1979 total. Appliance output will fall below the disappointing 1980-1981 levels and will be 15 percent below the 1977-1979 average. Freight car deliveries will total only about 25,000, far below the 88,000 average of 1979-1980. Barge production will be down 50 to 75 percent from last year. Steel output will fall below the weak levels of 1980 and 1981 and will be 30 percent below 1979.

Moreover, for almost every producer of goods, the impact of unfair trade—exacerbated by an overvalued dollar that is in large part the result of high interest rates—depresses operating levels as export opportunities contract and imports rise. In steel, import penetration of the U.S. market climbed from 14 percent in the first quarter of 1981 to 23 percent in the first quarter of 1982. Unfairly traded steel imports, subsidized by foreign governments, have been a key element in driving down operating levels, reducing not only employment but also the cash flow necessary to increase the efficiency of steel operations. Chart 2 tracks some of the key Heartland industries during the past eight years, and makes clear that 1982 is a disaster.

Chart 2: Production Trends in Industries Important to the Heartland

Indexes: 1967 = 100 (Seasonally Adjusted)



The end of inventory liquidation and the July 1 personal tax cuts will contribute to a revival in the output of consumer durables in the second half of 1982. However, the ongoing, devastating erosion of corporate profits (resulting from climbing unit costs because of the recession-caused drop in output per hour; the loss of volume; and price weakness) will sharply curb business investment programs. Shrinking internal cash flow will restrict investment, and the unprecedented real cost of money makes borrowing for investment purposes virtually impossible. Plant and equipment spending will decline at least until Fall. The decline would be much steeper were it not for the investment tax incentives enacted last Summer.

Table 4: Construction Contracts[5]—Industrial Heartland and United States

	1979	1980	1981	Percent change 1979-1981	Year to date 1981	Year to date 1982
	Nonresidential Buildings—Millions of square feet					
U.S.	1,377	1,200	1,166	−815	270	219
IH	320	257	206	− 36	45	30
IH as % of US	23	21	18		16	14
	Residential Building—Millions of dollars					
US	71,804	60,266	56,184	− 22	13,513	9,771
IH	14,457	9,938	8,729	− 40	1,689	1,004
IH as % of US	20	16	16		12	10

[5] F.W. Dodge data. Industrial Heartland represented by F.W. Dodge Regions 4 and 5.

As a result, machinery output in total will decline by 7 percent to 10 percent from the 1981 total; and the drops are likely to be steeper for farm implements and construction equipment. Nonresidential construction will also be sliding throughout the year, with the regional pattern of contract awards making it clear that the Heartland's decline will be deeper than the sagging national totals.

On the more positive side, *if* interest rates come down and stay down (and that is the critical element to a sustained economic recovery), the cyclical rebound in 1983 will be far stronger for the Heartland than for the rest of the nation. The volatile durable goods industries will come roaring back in 1983—at least compared with the disaster levels of 1982. The recovery will still be far from complete, and 1984 should also be a year of better-than-average growth for these states. Indeed, the long-term trend of U.S. economic activity from north to south will be overwhelmed by the cyclical rebound in the 1983-1984 period. But the rebound of the Heartland remains dependent on the lifeblood of adequate credit availability to permit national industrial revival.

The Mid-Atlantic

Thomas J. Spitznas

Chemical Bank

Having, at least so far, successfully weathered the second of two national recessions in as many years, the Mid-Atlantic economy should soon begin a moderate advance roughly in line with the anticipated recovery in the national economy. Because real interest rates are expected to come down only slowly during 1982, this year's national, and hence local, recovery will be on the slow side—slower than the short-lived recovery from the 1980 recession. Nevertheless, the recent surprisingly strong performance of the region in the face of adverse national economic conditions augurs well for the future.

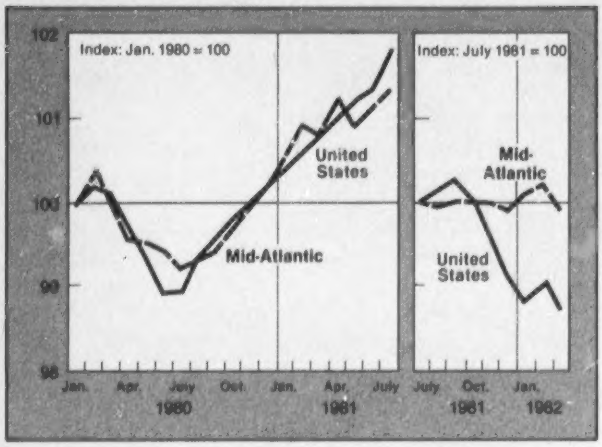
Historically, national recessions have had a relatively moderate impact on the Mid-Atlantic states, with their low concentration of cyclically sensitive industries. However, there is nothing in recent history quite like the region's cyclical performance during 1981 (Chart 3). At least as measured by private payroll employment, the Mid-Atlantic region barely felt the national downturn. The recovery from the 1980 recession was also somewhat atypical: Cyclically insensitive regions are supposed to lag well behind the nation instead of tracking the U.S. expansion closely, as the Mid-Atlantic did from July, 1980 to July, 1981. A large part of the Mid-Atlantic's recent favorable cyclical performance can be explained by the surprisingly robust New York City economy. Three sectors, making up around 45 percent of New York City's employment base, did very well for a recession year: construction; finance, insurance and real estate; and services. The unusual strength in construction is nearly all in office, hotel and apartment building in Manhattan. In finance, the rapidly growing areas are commercial banking and securities and commodity brokerage. Manufacturing remains chronically weak in New York City and northeastern New Jersey, but appears to be holding up elsewhere in the region. The region's other major weakness is retail sales, especially in New York City where a drop in foreign tourism during the second half of 1981 apparently cut heavily into sales.

Thomas J. Spitznas

Another major reason for the Mid-Atlantic region's comparatively good cyclical performance is the reversal during the past five years of the region's decade-long secular decline. Basically, this reflects the gradual working off of the many excesses that built up during the 1960's. Chief among these were unrealistically high labor costs and tax burdens (in New York) that reduced the ability of the Mid-Atlantic region to compete successfully with other U.S. regions. Wage rates continue to rise more slowly in the region than in the rest of the country, and the tax burden in New York State is still coming down. The region's inflation advantage, which narrowed

Chart 3: Employees on Private Payrolls

(Seasonally adjusted)



considerably from 2 percentage points to around 1/2 point last year, has begun to widen again. To be sure, structural problems remain: The region is still probably losing population, and some of its manufacturing base and much of its infrastructure are antiquated. However, the major structural problems that severely restrained the Mid-Atlantic economy during most of the 1970's will be much less of a drag during the upcoming recovery and expansion.

A final set of factors likely to have an impact on the Mid-Atlantic economy over the next several years is the Administration's economic policy. While it is not possible to derive precise numerical estimates of the impact of the various federal tax and spending policies that have been enacted and proposed, we can make some rough approximations of the relative impact. That is, it is possible to determine whether a region will fare better, about the same as, or worse than the rest of the country under the Administrations program. An obvious example is that states having a relatively large concentration of defense industries will benefit disproportionately from the defense spending element in government policy.

Because the personal tax cuts will benefit individuals in the higher tax brackets relatively more than those in the lower brackets, the higher the average taxable income of a region, the greater the tax benefit. Thus, the Mid-Atlantic region, especially New Jersey, will experience an above-average gain because per capita personal income is above the U.S. average (Table 5). On the other hand, cuts in social programs will have an above-average negative impact on regions with relatively large dependent populations, and the Mid-Atlantic region is also in this category. During 1979 and 1980, per capita transfer payments—a rough measure of dependency—were above the U.S. average. On balance, though, the personal tax cuts appear to slightly outweigh the spending cuts in the Mid-Atlantic region.

The potential impact on business in the region is also a mixed bag. In terms of value of prime defense contracts awarded in 1981, New York ranks third behind California and Texas. However, it is a distant third, and New York is actually slightly below the U.S. average on a per capita basis. Less of a help for the region are the business tax cuts that are aimed at newer manufacturing firms as opposed to the older manufacturing and the finance and service firms that predominate in the Mid-Atlantic region. However, the region has an above-average share of capital goods producers and should benefit from any stimulus to capital expansion nationally.

Finally, Mid-Atlantic state and local governments will be hurt by the spending cuts, but probably not much more than average. Also, except for federally mandated programs, the states and localities are not under any legal obligation to make up the cuts from their own revenues. However, because per capita outlays for social programs in New York are well above the U.S. average, the state may be under more political pressure than most state governments to pick up some of the cuts. New York, New Jersey, and New York City face the additional problem of having their corporate tax base tied to the federal base, so that all of the federal corporate tax cuts automatically lower state and local tax receipts.

In summary, the Mid-Atlantic region should experience a moderate economic expansion over the next two years, with perhaps one or two quarters of interrupted growth resulting from the Federal Reserve overstaying its policy of tight money. The relative absence of consumer durables and other interest-sensitive manufacturing in the region is a definite plus for the current business cycle. The trend forces, such as local wage and tax burdens, will exert less of a drag on the

Table 5: Relative Per Capita Personal Income, Transfer Payments and Defense Contracts—Mid-Atlantic as Percent of U.S. Average

	1979	*1980*	*1981*
Per Capita Personal Income			
Mid-Atlantic	108.1	110.3	111.3
New York	106.1	108.1	109.5
New Jersey	113.1	115.4	115.5
Per Capita Transfer Payments to Civilians			
Mid-Atlantic	103.5	118.3	n.a.
New York	107.0	121.9	n.a.
New Jersey	95.2	110.0	n.a.
Per Capita Prime Defense Contracts			
Mid-Atlantic	98.7	98.6	94.3
N.Y.	110.7	110.3	99.0
N.J.	70.0	70.6	83.3

region than in the past. However, continued population loss will be a problem. Despite all the local concern, "Reaganomics" will probably have a neutral impact on the Mid-Atlantic economy, which is not to deny that some groups and organizations will be affected more than others.

The Southeast

Donald E. Bedwell[6]

Federal Reserve Bank of Atlanta

Even if the national recession seems less foreboding in the burgeoning Southeast than across the nation, it still spells lingering trouble in 1982. Prospects look encouraging for the stirrings of a modest recovery by late 1982. The recovery gives little indication of being a vigorous one, however. The Southeast should benefit from its orientation toward service industries, and toward light rather than heavy manufacturing.

The relatively service-oriented economies of Florida and Georgia showed resistence to the national slowdown both in 1980 and in early 1981. Both states, however, began to feel the squeeze late in 1981. Louisiana's petroleum industry also has given it a measure of protection against the slowdown, although the recession has afflicted many of its other industries, particularly in the northern portion of the state. Alabama, Mississippi and Tennessee have suffered with manufacturing-oriented economies. New plants under construction in Alabama and Tennessee could prove helpful in 1982 as could a planned World's Fair in Knoxville; Mississippi's economy cannot rebound until construction begins to strengthen, reviving the state's lumber and wood products industries.

Employment in the region promises to continue flat, or even down, because of widespread weakness in manufacturing and in the public sector, as most levels of government impose new budgetary restraints and the slack economy cuts revenue from sales and income taxes. Government hiring also will be limited by reductions in federal spending.

Homebuilders and other construction-related firms should begin a gradual turnaround by late 1982, if the trend toward lower inflation persists. The arrival of 1982 saw the three-year-old slump in residential construction spreading to other construction categories. Even construction's "nonbuilding" category—public projects such as highways, bridges and dams, plus private installations such as power plants—has faded as local and state governments joined commercial businesses in tightening their budget belts.

Recession in the auto industry has meant cutbacks for auto assembly plants across the Southeast, and layoffs for ancillary firms that supply everything from tires to fanbelts. The auto slump has also hit textile firms that manufacture seat fabrics and auto carpeting. Textile manufacturers have also felt effects of the housing slowdown, and, furthermore, are competing against a deluge of imports, as the dollar's renewed strength has made foreign merchandise more competitive. Southeastern textile leaders hope that a cooling inflation rate and planned tax cuts will bring a turnaround for their industry later in 1982.

Airlines, major employers in the Southeast, find themselves in a crunch as business and pleasure travel continue in a tailspin. Truck lines similarly have felt the pinch. However, trucking executives report some difficulty in assessing the recession's impact, since it coincided with deregulation that opened their markets to new competitors.

Southeastern manufacturing industries should be given a shot in the arm by the Reagan Administration's tax cuts affecting business fixed investment—particularly in industries that can benefit from the liberalized tax credit for rehabilitation of aged factories. Those cuts should be a plus for the region, which depends heavily on its slow-growing nondurables manufacturing industries—textiles, apparel and food processing.

The Administration's emphasis on military spending also holds promise for the region in 1982. Some firms already have won substantial defense contracts while others are gearing up—in Florida, for instance, such firms as Martin Marietta, Honeywell and Harris. Defense constitutes Georgia's largest sector, and many federal programs throughout the Southeast are administered from the Atlanta area. Mississippi also should be a winner in the military contracting game, with greater defense expenditures through Ingalls Shipbuilding in Pascagoula, the state's largest industrial employer. This should also prove a profitable year for the mushrooming electrical equipment and supplies sector. High-technology firms of all kinds, in fact, are prospering.

Another bright spot is oil and gas exploration. The removal of price controls on petroleum is stimulating record drilling activity, and firms that make and repair oil field equipment and offshore platforms should continue to expand through 1982. Another plus for the region is the Tennessee-Tombigbee inland waterway, which promises to put hundreds of workers on the job this year. When completed in 1986, it will enable barges to travel from Mobile to the Great Lakes, adding to Alabama's attractiveness for plant sites.

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[6] This report is based on work by a number of staff members in the Bank's Economic Research Department.

Tennessee will host the Knoxville World's Fair in 1982. If the dreams of its advocates come true, that fair will offset the depressing impact of the national slowdown and still-intimidating gasoline prices. Those high pump prices and the recession could actually bring more short-haul visitors to southeastern attractions from neighboring states. But the closer-to-home trend could prove to be bad for Florida, which traditionally has welcomed tourists from around the country and around the world. With Miami taking its lumps in the national press, another no-growth year seems likely for Florida tourism. On balance, upward momentum and an economy based on service industries should help Florida weather 1982 with strength—even if it will not breeze through as painlessly as it did in the 1980 slowdown. A depressed housing market and high interest rates threaten to stem the flow of northerners into the state, and overbuilding of multifamily projects in south Florida also could prove a drag. In Georgia, the Atlanta area is worrying over possible overbuilding as several office towers rise downtown. Unless the national economy picks up, some developers fear, the new construction—blueprinted when the market was booming—could produce a glut of space.

Southeastern farmers entered the new year reeling under a heavy burden of debt and high interest costs after back-to-back years of drought and disappointing prices. An early January freeze dealt another surprise blow to Florida's citrus industry, still recuperating from a similar cold wave early in 1981. Even through farmers in the region fared better generally last year than in 1980, they wound up with losses that were particularly bitter because the outlook had appeared so hopeful at the beginning of the year.

For farmers' fortunes to improve in 1982, favorable weather must allow them to increase output, and prices must advance from 1981's depressed levels. This would allow producers to begin paying off their debt. Without that, the region could see financial failures multiply. The Farmers Home Administration, lender of last resort for farmers, already is carrying a heavy loan portfolio resulting from a series of painful setbacks since 1977, when some states experienced severe drought. The cattle industry, the Southeast's second largest farm income earner, proved to be another losing enterprise in 1981. Even with an appreciable expansion of the calf crop, cattlemen's returns skidded sharply lower because of a major decline in prices and rising feed costs.

Coal recently has emerged as a fast-growing U.S. export, and coal exports from Louisiana, Alabama and Georgia could well become a major trade event of 1982. The expected completion of the Tennessee-Tombigbee Waterway in the latter half of the decade and, longer term, the possible deepening of channels at the Ports of New Orleans and Mobile could allow coal exports to soar. Grain and soybean exports, on the other hand, may not expand as rapidly in 1982 as in recent years because of increased harvests elsewhere in the world and the strong exchange value of the dollar. Florida exports tapered off ominously late last year, even out of Miami, which has grown enormously as an exporter of a variety of products.

The Southeast's rising international trade with Latin, Asian and African markets has been accompanied by rapid growth of international financial activity. Miami and Atlanta have been centers of that growth, expected to continue in 1982. An important new development is the authorization in December 1981 of International Banking Facilities. With such a facility, domestic banks can borrow funds from foreigners, free from the reserve requirements that cover domestic deposits, and lend to foreigners at world interest rates. A significant volume of international financial transactions formerly booked in offshore branches of U.S. and foreign banks is likely to come "home" to mainland offices this year.

"America's Breadbasket"

Marvin Duncan[7]

Federal Reserve Bank of Kansas City

Marvin R. Duncan

Although 1981 began with some optimism over prospects for stronger farm product prices, that optimism proved to be largely unfounded. World food supplies were reduced to the lowest levels since the world

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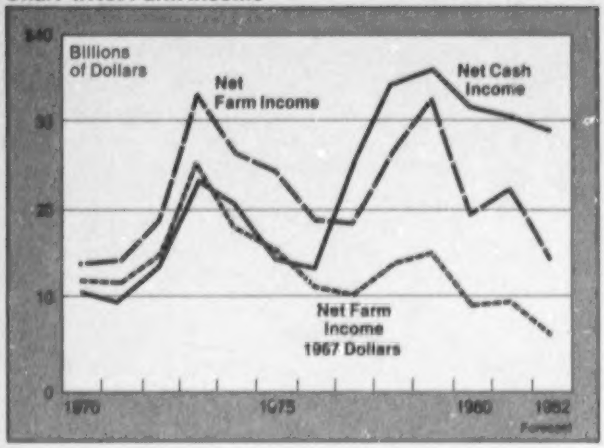
[7] The views expressed are solely those of the author and do not necessarily represent the view of the Federal Reserve Bank of Kansas City or the Federal Reserve System.

Chart 4: Net Farm Income



food crisis of the early 1970's, prospects for crop production appeared more tentative than usual, and higher livestock prices appeared likely, as well. Thus, farmers were poised for recovery from the disappointing income level of 1980. Net farm income of $19.9 billion in 1980 was down 39 percent from 1979 (Chart 4). Instead, farmers experienced the adverse price impact of large supplies for some crop commodities. But more importantly, there was a substantial drag on farm income in 1981 because of sluggish demand for farm products—due to the weakness of both the U.S. economy and the economies of its trading partners. As a result, the Index of Prices Received by Farmers declined throughout the year.

Excellent growing conditions and a large planted acreage in 1981 resulted in record U.S. production of wheat (2.8 billion bushels), corn (8.2 billion bushels), and cotton (15.7 million bales). Soybean output (2 billion bushels) was the second largest on record. Meat production was up about 1 percent from year-earlier levels, as higher beef and poultry production more than made up for somewhat lower pork output. The high levels of output coupled with sluggish demand growth held the increase in cash receipts from farm marketing during 1981 to about 4.6 percent. Direct government payments to farmers increased by about $600 million over 1980 levels. But cash production expenses, up 8.6 percent from a year earlier, more than offset increases in cash income. Thus, *net cash* income declined for the second year in a row—to $30.9 billion. *Net farm* income, an increasingly unreliable measure of farmer welfare, increased by $3.1 billion but only to $23.0 billion—the result of higher inventory levels for major farm products.

Adding to the discouraging farm income situation, the real value of farm equity declined for the second year in a row as farm asset values increased by less than the prevailing rate of price inflation. During the fourth quarter of 1981, land values declined in current dollars across the Breadbasket.

The outlook for 1982 is one of continued weakness in farm product prices. Weakness in farm product prices has tempered food price increases. Retail food prices increased 7.8 percent in 1981—less than the Consumer Price Index for the sixth time in seven years. Food prices are expected to increase between 5 and 9 percent in 1982, most likely in the middle of that range.

Farm product price movements during 1982 will be heavily dependent on both domestic and export product demand and on production levels. Demand will be determined by the performance of the U.S. economy and those of its trading partners. The U.S. economy is expected to begin recovery from recession during the second half of the year, and industrialized western countries are also expected to show positive economic growth later this year. Thus, traditional markets for U.S. farm products may strengthen by yearend. Less certain is the level of U.S. farm export sales to the centrally planned economies. The current deep chill on relations with the U.S.S.R. and the shaky financial condition of many Eastern European countries do not bode well for growth in farm exports to these countries. On balance, the value of U.S. export sales is expected to dip this fiscal year to about $42.5 billion, even though export volume may increase modestly.

Carryover stocks of major crop commodities at the end of the current crop marketing year will be large. However, since most of the carryover grain will be tied up in the Farmer Owned Reserve or in Commodity Credit Corporation inventory, free market stocks will be rather tight. On the other hand, it is likely that planted acreage in 1982 will be large, despite an acreage set-aside program for food and feed grains and for cotton. Without greater inducements to farmers to take part in the government's program, it is unlikely that participation will be sufficient to reduce 1982 crop production substantially. Consequently, strength in crop prices will be even more heavily dependent upon stronger domestic and export demand.

U.S. livestock production in 1982 is expected to be about as large as in the previous year, but the mix will change. Beef and poultry production are expected to increase slightly, while pork output may be off by as much as 7 to 10 percent. Both hog producers and cattle feeders, after many months of losses, may expect to turn narrow profits in 1982—primarily because feed grain and protein supplement prices, as well as the prices of replacement cattle and feeder pigs, have been bid down to levels that permit profitable production. Livestock prices should also respond to stronger demand, as the U.S. economy begins to register positive growth.

Nevertheless, farm income levels in 1982 will be disappointing for the third year in a row. Cash receipts from farm marketing are expected to increase only modestly, and the level of government payments to farmers will be close to that of 1981. Thus, gross farm income may climb by only 1 to 4 percent. However, farm production expenses are expected to rise by 3 to 6 percent. As a result, farm income (before inventory adjustment) may decline to the $14-$17 billion range. Two years of depressed farm income and the prospect of a third have caused farmers to use agricultural credit more cautiously. Meanwhile, fund availability at agricultural banks, and at commercial banks across the Breadbasket, has improved. With an average loan-to-deposit ratio at Tenth Federal Reserve District agricultural banks of 58.8 percent and with about 57 percent of reporting banks desiring a higher ratio, credit availability should not be a problem for bank customers this Spring, nor should it be a constraint at Farm Credit System outlets. However, for those farmers who do not qualify for credit on normal commercial terms, credit availability from government sources is expected to be significantly reduced from past years. Thus, they face the prospect of refinancing farm real estate, selling capital assets, or obtaining Farmers Home Administration loans from a more limited supply of funds.

While demand for credit at agricultural banks has been weak, a steady infusion of credit from the Commodity Credit Corporation (CCC) since mid-1981 has provided an important boost to farmers' cash flow. At the end of February, outstanding CCC commodity loans totaled $11 billion, with about two-thirds of that lending occurring since September 30, 1981. Additionally, farmers have received about $1.5 billion in deficiency payments and in storage payments on grain in the Farmer Owned Reserve over the past few months.

In summary, the U.S. farm sector will experience depressed economic conditions in 1982, for the third year in a row. Farm income may decline to the $14-$17 billion range, and this will result in substantial financial pressures and some increase in the turnover of farm operatorship and ownership. If farm prices and income recover by 1983, the farm sector will suffer little lasting damage. Recovery in the farm sector is likely to be led by higher livestock prices. Finally, farm real estate prices, although registering decline during 1981 and 1982, can be expected to firm up with the onset of recovery from the current farm recession.

The Southwest

James A. Byrd

InterFirst Corporation

The Southwest continued to feel some of the negative effects of the national recession as this year began. But, even so, the "downers" in the region—in residential construction, in big-ticket consumer durables, and in domestic auto sales—have continued to be only about half as bad as those in the comparable national magnitudes, and only a small fraction of the severe downturns that have occurred in some other regions around the nation.

Unemployment rates in the four states of the Southwest increased between January, 1981 and January, 1982 (Table 6). In Texas and in Oklahoma, the increases were not very significant, and their unemployment rates remained significantly below the national average. The economies of both states continued to benefit in 1981 from accelerated onshore and offshore oil and gas drilling and exploration activity. Oil production from old wells continued to decline, but this produced only slightly reduced royalty income for individuals and companies and reduced severance tax income for state governments. It had very little effect on "oil patch" activities which have been booming in recent years. However, the count of active drilling rigs topped out recently and may be turning down soon. Last year's frenetic pace just cannot be sustained.

James A. Byrd

Larger increases in unemployment rates (above the national rate) for Arkansas and for Louisiana indicate weakened national and regional demands for furniture, fixtures, equipment and lumber products in the case of Arkansas, and continued downward adjustments at old oil refineries and related facilities in the case of Louisiana. No significant changes in these industry groups are now expected in 1982. Turnarounds will be modest at best this year. Conditions in the Arkansas

Table 6: Unemployment Rates (Not Seasonally Adjusted)

	January 1981	*January 1982*
Texas	5.6%	5.9%
Oklahoma	4.4	4.9
Arkansas	9.8	12.6
Louisiana	8.7	10.0

agricultural sector also provided a major drag on net farm income in 1981 and are not expected to improve much this year.

Nonresidential construction activity continues to be weak in some Southwest metropolitan areas and has continued to be very strong in others. Office-building construction—both downtown and outlying—continues to boom in Houston, Dallas, Fort Worth, and San Antonio. Some slowdown from last year's fast pace of start-ups seems inevitable in those areas, beginning later this year. However, the volume of existing construction activity will prevent any actual turndowns over the next year or so.

The disinflation that has been occurring nationwide over the last year has also been occurring in the Southwest. Rates of price increase in the region that had outpaced the national rates of increase a bit over the last two years (principally because of starting-base calculations) are expected to about match the slower rate of change expected for the nation this year and next. The overall cost of living for most Southwest families still remains well below the national average. The absence of state income taxes also provides a more favorable income margin.

Major weaknesses in the Southwest thus far have occurred in the agricultural sector of the four states. Farm and ranch incomes are still an important base in the region and spawn an unappreciated volume of related agribusiness activities. Key grains and red meats are important crops here. The current outlook for 1982 conditions is not at all encouraging.

Units of state and local government in the Southwest will be experiencing reductions in the volume of federal dollars received in this and future years. While they are not nearly as dependent on these dollars as many governmental units in several other regions, these units will now be required to cut back somewhat on spending budgets—to shift at least from a go-go to a go-slow philosophy.

Financial institutions in the Southwest have been subjected to the same interest rate levels and margin pressures as those in other regions during the past year. They will continue to be so subjected in 1982. But loan volumes and deposit totals have been growing much faster than the national averages and those of most regions during the last few years. This asset and liability growth has mirrored a strong economic base performance, and is expected to continue to do so this year.

The Mountains

Tucker Hart Adams

United Banks of Colorado

Tucker Hart Adams

After a decade of pointing smugly to the Mountain region's rapid growth and its insulation from the swings of the business cycle, the unthinkable question is rearing its ugly head: "Do falling energy prices mean an end to the energy boom which has fueled growth in the Mountain region?" Falling oil prices, in combination with problems in the high-technology sector and declining government employment, introduce an element of doubt as to the validity of the usual rosy forecast for the region.

The eight-state Mountain region is a sparsely populated area of the United States (only 13 people per square mile, compared with 15 times that density in the northeast), which has been growing rapidly for the last 30 years. It grew substantially faster than the national average in the 1960's, and was the fastest growing region in the country during the 1970's. The Census Bureau projects that seven of the ten fastest growing states in the nation during the 1980's will be Mountain region states.

In addition to being a lively growth area, the Mountain region also has enjoyed a stable economy. Since 1975, its unemployment rate has been below the national average, with Wyoming often having the lowest unemployment rate in the nation.

Business failures during the last decade provide still another measure of stability. The Mountain region has had one of the two lowest failure rates in the United States except in 1975, when a sharp increase in failures in Arizona put the region in the third lowest slot. In mid-1981, when failures nationally had increased by 44 percent, Mountain region failures were up only 32 percent and had actually declined in Idaho, Colorado, New Mexico and Arizona.

Three factors account for the region's historic stability: (1) the size and composition of the cyclical manufacturing sector; (2) the relative immunity of the important energy sector from the business cycle; (3) the presence of a large government sector.

Manufacturing provides only 13 percent of the region's income; nationally, that figure is 26 percent. High technology is an important component of this sector in Colorado, Arizona, New Mexico, Utah and Idaho. In some of the major cities, it provides up to 80 percent of the manufacturing jobs.

The importance of the energy sector is difficult to quantify, given the way employment and income data are collected. Direct employment in mining provides more than 5 percent of the region's income, three times the national average, but this is only the tip of the iceberg. In Denver, the region's largest city, the energy industry, directly and indirectly, provides 21 percent of the jobs, leases over 50 percent of the downtown office space, and accounted for 26 percent of the job growth in the past decade. The Mountain region contains 8 percent of the country's oil and gas reserves, more than 40 percent of its coal, and approximately 90 percent of uranium and oil shale reserves. Oil price shocks, which helped plunge the nation into recession in 1973 and 1980, accelerated economic expansion in much of the Mountain region.

The government sector accounts for 19 percent of the region's income, compared with 16 percent nationally. Both a heavy military concentration and the presence of regional headquarters for many federal agencies in Denver and Salt Lake City have helped stabilize the economy in the face of cyclical declines.

The very factors that provided growth and stability for the Mountain region in the 1970's could have the opposite impact in the current forecast period. Government employment is declining in the face of cutbacks in federal, state and local programs and will continue to shrink if the Administration's philosophy of a larger role for the private sector prevails. Fortunately, the region is less dependent on federal grants than the nation ($410 per capita relative to a national average of $419), so it will be somewhat sheltered from the cuts in aid to state and local governments.

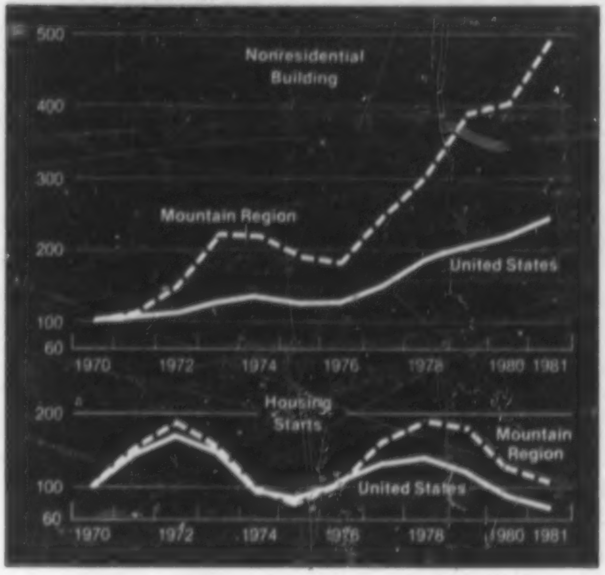


Chart 5: Construction Activity in Mountain Region and United States
Index: 1970 = 100

High-technology industry is facing lower earnings as recession-reduced demand, foreign competition, and price slashing squeeze profit margins. Expansion plans have been put on hold and actual layoffs are occuring in some areas, although the brunt of the employment cutbacks has been outside the Mountain region. At best, recovery is not expected until 1983, so little stimulus to growth is expected from high-technology expansion in 1982.

Table 7: Mountain Region Economic Indicators

		Forecast		*Percent Change*		
	1981	*1982*	*1983*	*1981*	*1982*	*1983*
Personal income (billion $)	115.9*	126.7	141.9	13.1	9.3	12.0
Retail Trade (billion $)	56.9*	63.0	71.0	13.6	10.7	12.7
Unemployment (%)	6.3	7.0	6.5	—	—	—
Housing (thousand units)	102.2	106.3	127.5	12.2	4.0	20.0
Nonresidential building (billion $)	4.6	3.4	3.6	24.1	26.0	6.0

*estimated

The crucial variable in the 1982-1983 forecast is oil price. The uranium industry is basically shut down, the marginal oil shale projects have been postponed indefinitely, coal output is not forecast to expand for several years, and many of the nonenergy minerals (such as copper, molybdenum and zinc) are severely depressed. However, until recently, oil and gas exploration and development, particularly in the Overthrust Belt, were expected to continue setting new records. If oil prices stabilize at about $28 per barrel (considered by many to be the optimal price from Saudi Arabia's viewpoint) and high technology begins to recover later this year, then Mountain growth in 1982 will parallel the national recovery. Unemployment will average above 6 percent, still well below the national rate, but employment growth will be sluggish by historic standards. Housing construction will continue to be depressed by high mortgage rates and affordability problems, although pent-up demand will help the region outperform the nation. Nonresidential construction will drop sharply (albeit from exceedingly high levels) as the demand of energy firms for additional space evaporates.

The outlook for 1983 is even more clouded, since political decisions will determine national economic performance and energy prices will dictate which side of that growth path the Mountain region follows. The most likely scenario is that the difficult decisions will be made, resulting in continued inflation improvement and gradually declining interest rates. Tax cuts and rising employment will stimulate consumer spending, which will in turn stimulate business investment. Unless oil prices continue to decline, the Mountain region will benefit from the strong general recovery.

Looking out beyond the near term, it is difficult to envision any scenario in which the region does not outperform the nation. With its broad base of energy reserves, the ideal climate of its major population centers, recreational opportunities, low unionization, and attractive tax rates, the region is well positioned to continue to grow.

The Pacific

Joseph A. Wahed

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Joseph A. Wahed

Business conditions continue to weaken in the Pacific region as the recession's impact spreads to a broader group of industries and to a growing number of communities. This slump, which is really an extension of the one we had in 1980, would have been far worse were it not for the strength in defense spending and in selected specialized service activities. Hardest hit among the industries are, of course, housing, lumber, thrift institutions, and durables manufacturing, but the recession is sparing virtually no one. The unemployment rate is highest in the lumber regions of Oregon, Washington and Northern California—in many cases exceeding 25 percent of the work force. Job growth in other industries is very disappointing, as most are facing declining sales, bulging inventories, and narrowing profit margins. The recession is being made worse by the financial strains in the economy as reflected in the extraordinary level of interest rates and the squeeze on profits. State and local governments in the Pacific region are also feeling the recession and are having to tighten their capital spending plans as well as their hiring policies.

The Pacific region, as defined here, includes California, Oregon, Washington, Alaska and Hawaii and accounts for roughly 15 percent of the U.S. economy. It has a population of around 32 million, an employment level of over 14 million, and personal income of $380 billion. California dominates the region, amounting for roughly 75 percent of its business activity. The region's economic structure is heavily tilted toward the fast-growing industries of the future—aerospace, electronics, high-technology research, specialized agriculture, foreign trade, and a variety of business and consumer services. These and other factors made the region a leader in economic growth during the last several decades. Economic growth goes in cycles, and the Pacific region is hardly ever immune from severe national recessions or from international shocks. The degree of slowdown, however, often differs. At present, the recession in the Pacific region is not quite as bad as elsewhere, but it is severe and a comparison with the nation would only be a false attempt to make the region "look better."

The immediate prospects are poor. Recovery may take place later in 1982 but it will be weak and spotty. This is largely due to the record level of interest rates and to the highly uncertain financial environment nationally. At best, a bona fide recovery is doubtful before 1983.

One of the industries deeply affected by the recession is housing. It is not an exaggeration to call it a depressed industry, particularly in California. Further declines are expected as builders and lenders both withdraw from the housing market. Demand may be strong, but *effective* demand is being hurt by a combination of factors. For one thing, the prospects are not good for any significant decline in mortgage rates, which are now in the neighborhood of 16-18 percent. (California mortgage rates tend to be higher than elsewhere in the nation.) In addition, deposit flows into the region's financial institutions remain very disappointing. In effect, long-term financing is a rarity at present. Consumers, on their part, are still not quite sure which mortgage instrument to adopt, so there is a lot of holding back. Housing prices are, mercifully, easing under these forces but will have to fall further if any improvement in sales is to take place. The bottom line is that housing activity totaled only about 155,000 units in 1981—a 60 percent drop from the peak level reached in 1977. In 1982, our forecast indicates a level of just 125,000 homes. Housing-related industries such as lumber, hardware and to a lesser extent paper products, are also feeling the recession. In Washington, Oregon and Northern California, logging camps have closed and truck drivers, mill workers, and operators are out of work. In Oregon alone, about 22,000 workers are unemployed as a result of the depressed lumber industry.

In early 1982, the jobless rate in the heavy lumber areas of Northern California was 25 percent or more. Meanwhile, lumber shipments and orders continue to fall and prices remain soft.

In the region's important defense-aerospace-electronics markets, business trends are mixed. The worldwide recession has hurt the financially troubled airlines. Passenger and freight traffic is declining and new orders for commercial aircraft have fallen sharply. Lockheed Corporation in Burbank is phasing out its L-1011 program, while Boeing Corporation in Seattle has laid off 5,500 workers and stretched its production schedule. More layoffs are anticipated. In sharp contrast, rising defense contracts (especially in California) have resulted in near-boom conditions in this important industry. Procurement and research and development for missiles, aircraft, electronics and related defense equipment have substantially aided the economy of the Pacific region. Last year, nearly $20 billion in contracts were awarded to defense contractors in the region and more is expected in 1982, especially in California which is heavily involved in new strategic weapons. These include missiles (Cruise, Trident, MX), bombers (B1 and Stealth) and a variety of sophisticated electronics communications equipment. Electronics markets, especially for semiconductors, have not been spared during this recession. New orders for electronics equipment have softened as large corporations reduced their capital spending plans for 1982. Demand for office computers, on the other hand, is still fairly strong and leisure electronics equipment (video games, etc.) is also doing well.

Consumer markets in the Pacific region remain quite disappointing. As in other parts of the nation, big-ticket items such as cars, furniture and other household goods are not doing well. Retailers are reporting a reluctant and cautious consumer. It is clear that confidence levels (and of course, weak real incomes) are taking their toll on department stores and auto dealers. In California, the weakness in auto sales may come as a surprise because fully half of new car sales are foreign. Consumer markets will likely improve after midyear, when the tax cut takes effect and as the improvement in inflation finally starts sinking in. But the high unemployment and the uncertain financial environment will dampen the average consumer's enthusiasm.

Retail stores and restaurants are also feeling the pinch from the reduced flow of foreign and domestic tourism. The tourist industry is important in the heavily traveled regions of the west, especially Hawaii, San Francisco, Southern California, and parts of the northwest and Alaska. However, hotels reported lower occupancy rates for much of 1981 and early 1982. In Hawaii, the number of visitors has stabilized at just under 4 million and is expected to edge up very moderately in 1982. Heavy marketing efforts, reduced airfares and the severe winter weather on the mainland have helped raise hotel occupancy rates and improve tourist activity in Hawaii; whether this can be sustained for the rest of 1982 and 1983 is uncertain.

Table 8: Selected Economic Indicators for the Pacific Region[a]

			Forecast	Percent Change	
	1980	1981	1982	1981	1982
Population (millions)	31.8	32.5	33.0	2.2	2
Personal income (billion $)	338	377	410	11.5	9
Employment (millions)	14.3	14.4	14.4	0.7	—
Unemployment (%)	6.7	7.7	9.4	—	—
Retail sales (billion $)	145	165	180	13.8	9
Nondurables	98	113	124	15.3	10
Durables	46	52	56	13.0	8
Farm output (billion $)	18.3	19.2	19.0	4.8	—
Housing (thousand units)	210	153	125	—26.2	—18
Defense contract awards (billion $)	17.2	19.7	23.0	14.5	17

[a] 1981 figures partly estimated; 1982 forecasts by Economics Department, Wells Fargo Bank.

The Pacific region's farmers are facing difficult conditions. A combination of bumper crops, falling commodity prices, and high interest rates have put the squeeze on profit margins. In addition, the region's export markets have weakened as a result of the worldwide recession. Wheat prices in 1981 were at their lowest level in three years and cotton and bean prices have also fallen sharply. The med-fly quarantine also increased production costs and disrupted domestic and international markets. Prospects for the rest of 1982 and into 1983 are mixed at best. The region's important beef industry is facing tremendous uncertainty because of shifting consumer demand to cheaper forms of protein such as chicken, turkey, fish and beans. Changing consumer tastes, however, are aiding those food processors specializing in ethnic and health foods such as vegetables, fruits and low-calorie items. In 1982, net farm income in the Pacific region will likely decline again as a result of these conflicting forces.

Business conditions will continue quite poor for much of this year in the Pacific region. Hopes for a recovery rest essentially on a sharp decline in interest rates (which is unlikely unless the budget deficit is trimmed) and the stimulative effects of the nationwide tax cut expected in July. Meanwhile, the continued progress in reducing inflation, as well as the liquidation of unwanted inventories, should set the stage for some improvement as we get closer to 1983.

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Research Bulletin

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Corporate Debt: Changing Perceptions of Financial Risk

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The Conference Board

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Financial Risk and the Quality of Credit

THE COMBINATION of high interest rates and recessionary conditions in many industries during recent months has forcefully demonstrated the uncomfortable reality of financial risk to many corporate borrowers. Spectacular examples of actual or near default of debt obligations by large corporations have appeared with distressing frequency in the news media. And some observers believe there are many other firms that are edging dangerously close to the default stage.

For many years, conventional wisdom in corporate financing circles has held that it is beneficial for some portion of a corporation's capital structure to be in the form of debt. The reasoning underlying this contention is that a company can advance the economic well-being of its stockholders by borrowing part of the funds it needs, investing these funds in the business, and earning a rate of return that exceeds the carrying costs of the debt. This principle is commonly referred to as "leverage."

Federal income tax laws have encouraged the use of leverage by permitting corporate taxpayers to claim a deduction for interest payments on their annual income tax returns, thus effectively reducing the cost of borrowing. In contrast, dividend distributions to stockholders are not recognized as deductions for income tax purposes. Consequently, it is a relatively rare thing to find a major publicly owned U.S. corporation with a debt-free balance sheet.

In the days when the economic climate was happier than it is at present, most large corporations experienced little difficulty in managing their debt loads. When interest rates fluctuated within a rather narrow range, maturing issues of debt securities could usually be refinanced without too much upset. Since the onset of the present unprecedented high rates, however, refinancing has caused severe strains for many borrowers.

These high interest rates, combined with a weak stock market, have also discouraged company financial officers from long-term financing, leading some of them to violate one of the basic tenets of conservative financial management by financing long-term investments with short-term debts. When their businesses suffered severe recessionary downturns, combined with sharply rising costs in an inflationary environment, some of these companies found themselves hard-pressed to manage their debt burdens.

Objectives of this Study

The circumstances described above have heightened the concerns of many people that the degree of financial risk to which U.S. corporations are exposed has markedly increased in recent years, and that this trend is likely to continue. As a result, they fear, the quality of business credit in the U.S. economy is deteriorating. Others, who do not share this concern, contend that conventional measurements of liquidity and solvency have lost some of their validity because of inflation. They further believe that financial managers in large corporations are now generally much better equipped to manage financial risks with smaller margins of safety than they were only a few years ago.

The purposes of this project are to examine changing perceptions of financial risk on the part of three groups that are deeply concerned with its effects—credit-rating agencies, investment bankers, and corporate financial executives—and to describe the measures taken by company managements to adapt to changing conditions of financial risk.

Quantitative Measures of Financial Risk

Financial analysts have developed a number of ratios and other quantitative methods that can give a pretty good indication of the degree of financial risk that companies are exposed to. Comparisons of these measurements, over a period of time, can indicate whether a firm's position is improving or deteriorating. And comparisons with other companies or with industry averages can also reveal significant information.

Five types of ratios are frequently used (see box on page 4). These include liquidity ratios that assess a firm's ability to meet its current debt-payment requirements. Examples of frequently used liquidity ratios

Financial Risk vs. Credit Risk

Sometimes there is confusion over the meaning of the terms "financial risk" and "credit risk." *Financial risk* is the risk a company assumes when it borrows funds and exposes itself to mandated debt-service payments. *Credit risk* refers to the exposure assumed by the lender when funds are advanced to a corporate borrower, and there is some possibility of default by the borrower. The degrees of financial risk and credit risk are a function of the size of the debt burden assumed by the borrower and the extent to which corporate cash flows cover interest and principal repayments.

Financial risk is a variable that corporate management must control in order to safeguard the future financial viability of the enterprise. It is simply the exposure that a borrowing company accepts when it commits itself to a contractual liability for interest payments on the debts that it incurs, and to the repayment of the principal of these debts. The risk consists of the possibility that the company may not be able to live up to these obligations.

Credit risk is a problem for the lender or creditor, and is subject to various lender or investor actions—including credit analysis and evaluation, and diversification of loans and investments. Thus, financial risk and credit risk are two sides of the same coin—corporate debt quality.

Financial Ratios that Measure Certain Aspects of Financial Risk

Category	Ratio	How Calculated	Significance
I. Liquidity	Current ratio	$\frac{\text{Current Assets}}{\text{Current Liabilities}}$	Ability to pay interest and principal on debt
	Quick ratio (acid test)	$\frac{\text{CA - Inventory}}{\text{Current Liabilities}}$	More demanding measure of ability to pay on debt
	Working capital ratio	$\frac{\text{CA - CL}}{\text{Total Assets}}$	Measures net liquidity relative to size of firm
II. Cash-flow and Fixed-Charge Cover	Times interest earned	$\frac{\text{Pretax Profit + Interest Cost}}{\text{Interest Cost}}$	Margin of safety to cover interest expenses
	Fixed charge coverage	$\frac{\text{Income Available to Meet Fixed Charge}}{\text{Fixed Charges}}$	Broad measure of margin of safety to cover interest and other fixed charges
III. Asset Turnover	Inventory turnover	$\frac{\text{Sales}}{\text{Inventory}}$	Efficiency of inventory investment
	Average collection period	$\frac{\text{Receivables}}{\text{Sales per Day}}$	Efficiency of receivable management
	Fixed asset turnover	$\frac{\text{Sales}}{\text{Fixed Assets}}$	Efficiency of fixed asset investment
	Total asset turnover	$\frac{\text{Sales}}{\text{Total Assets}}$	Efficiency of total asset investment
IV. Profitability	Profit Margin	$\frac{\text{Net Profit after Tax}}{\text{Sales}}$	Effectiveness of management
	Return on assets	$\frac{\text{Net Profit after Tax}}{\text{Total Assets}}$	Overall managerial effectiveness
	Return on net worth	$\frac{\text{Net Profit after Tax}}{\text{Net Worth}}$	Return available to shareholders
V. Financial Leverage and Solvency	Debt to total assets	$\frac{\text{Total Debt}}{\text{Total Assets}}$	Overall measure of leverage
	Net worth to debt	$\frac{\text{Net Worth}}{\text{Total Debt}}$	Solvency protection afforded
	Debt as percent of capital funds	$\frac{\text{Long-Term Debt}}{\text{Capital Funds}}$	Use of debt to provide long-term funds

include the current ratio $\left(\frac{\text{current assets}}{\text{current liabilities}}\right)$, the quick ratio $\left(\frac{\text{current assets - inventory}}{\text{current liabilities}}\right)$, and working capital ratio $\left(\frac{\text{current assets - current liabilities}}{\text{total assets}}\right)$. Liquidity ratios generally compare short-term assets with short-term liabilities for the purpose of assessing the company's ability to discharge its maturing obligations by use of its existing liquid assets.

Cash-flow and fixed-charge coverage ratios compare cash flows with various debt-service payment requirements. A comfortable margin of cash flow relative to debt-service payments suggests a lower degree of financial risk. Examples of cash-flow and fixed-charge coverage ratios include times interest earned

$\left(\frac{\text{pretax profit + interest cost}}{\text{interest cost}}\right)$, and fixed-charge coverage $\left(\frac{\text{income available to meet fixed charges}}{\text{fixed charges}}\right)$.

Asset-turnover ratios attempt to measure the efficiency of use of corporate assets. The more efficiently corporate assets are used, the better able the corporation should be to maintain a high level of profit and, consequently, meet its financial obligations. Asset-turnover ratios include: inventory turnover $\left(\frac{\text{sales}}{\text{inventory}}\right)$, turnover of receivables (also measured as average collection period $\left[\frac{\text{receivables}}{\text{sales per day}}\right]$), fixed-assets turnover $\left(\frac{\text{sales}}{\text{fixed assets}}\right)$, and total-assets turnover $\left(\frac{\text{sales}}{\text{total assets}}\right)$.

Profitability ratios reflect the ability of the corporation to generate cash flows available for debt-service payments. But, more importantly, they reflect on the quality of corporate management planning for—and realization of—profits. Profitability ratios include: profit margin on sales $\left(\frac{\text{net profit after tax}}{\text{sales}}\right)$, return on assets $\left(\frac{\text{net profit after tax}}{\text{total assets}}\right)$, and return on owners' equity $\left(\frac{\text{net profit after tax}}{\text{net worth}}\right)$.

Financial-leverage and solvency ratios indicate to what extent a corporation makes use of borrowed funds as compared with funds contributed by stockholders. In addition, these ratios point to the equity protection available to guard against financial risk from insolvency. Widely used financial-leverage and solvency ratios include: debt to total assets $\left(\frac{\text{total debt}}{\text{total assets}}\right)$, owners' equity to debt $\left(\frac{\text{net worth}}{\text{debt}}\right)$, and debt as a percent of capital funds $\left(\frac{\text{long-term debt}}{\text{capital funds}}\right)$.

Trends in Measurement of Financial Risk

As a preliminary indicator of changes in the degree of financial risk to which U.S. corporations are exposed, the *Quarterly Financial Reports* of the U.S. Federal Trade Commission (FTC) were consulted. The data on the current ratio and the ratio of stockholders' equity to debt were considered to be most revealing for purposes of this analysis.

The FTC series on the current ratio reflects a declining trend in liquidity among manufacturers, and a slight downtrend in liquidity in mining, retail and wholesale companies. Over the period 1970 to 1980, the current ratio in the manufacturing sector declined from 2.0 to 1.7.

Over the same period, companies reporting to the FTC increased their use of financial leverage. The FTC data indicate that the ratio of stockholders' equity to debt declined from 2.4 to 2.3 in manufacturing, from 1.7 to 1.3 in mining, from 1.4 to 1.2 in both retail trade and wholesale trade.

As a further indicator of trends in measurement of financial risk, a study was made of data in the annual reports of 200 randomly selected companies whose securities are traded on the New York Stock Exchange. Data were gathered concerning interest coverage for the period 1971 to 1981. The 200 companies represent a wide range of industry groups, and companies from all size categories were included in the sample. The distribution of companies by size category follows:

Annual Sales, 1981	*Number of Companies*
$5 billion and over	18
$1 billion - $5 billion	71
$750 million - $999 million	21
$500 million - $749 million	26
$250 million - $499 million	30
$100 million - $249 million	27
Under $100 million	7
	200

The following tabulation shows that, on balance, there was a decline in interest coverage among the 200 companies. Furthermore, this decline was more pronounced among the smaller companies. At the same time, there was an increase in interest expense as a percent of pretax income. The median for all companies increased from 19.5 percent in 1971 to 27.9 percent in 1981. There was an even more substantial increase in this median value among smaller companies.

Ten-Year Trend in Interest Coverage

	200 Companies	*64 Smaller Companies*
Number of companies with decline in interest coverage	119	38
Percent of companies	59%	71%
Interest expense as percent of pretax income—median of all companies 1981	27.9%	27.5%
1971	19.5%	15.9%

Leverage has become a more prominent feature in the financial strategy of the 200 companies studied. The incidence of debt increased over the ten-year period, as shown in the following tabulation. The ratio of long-term debt to capital funds increased from 25.0 percent in 1971 to 26.2 percent in 1981. Again, there was a more marked shift toward greater financial leverage among smaller companies.

Ten-Year Trend in Financial Leverage

	200 Companies	64 Smaller Companies
Number of companies with increase in leverage	103	30
Percent of companies	52%	57%
Long-term debt as percent of capital—median of all companies 1981	26.2%	28.3%
1971	25.0%	22.0%

A decline in liquidity, as represented by current ratios, was the most noticeable trend in the 200 companies whose annual report data were analyzed. The median current ratio declined from 2.6 in 1971 to 2.0 in 1981. In 1981, 108 of the 200 companies had a current ratio of 2.0 or less.

Ten-Year Trend in Liquidity, 1971 to 1981

	200 Companies	64 Smaller Companies
Companies whose current ratios declined:		
Number of companies	149	41
Percent	74%	77%
Median current ratios:		
1981	2.0	2.2
1971	2.6	2.8

In summary, a review of trends in financial ratios of the companies studied indicates a clear tendency toward lower liquidity, increased use of financial leverage, and a narrower margin of safety insofar as interest coverage is concerned. These trends suggest an upward shift in financial risk.

Perceptions of Financial Risk by Credit-Rating Agencies

THE SERVICES of credit-rating agencies are an important element in the operations of the nation's financial-markets system. Such well-known rating agencies as Duff and Phelps, Inc., Dun & Bradstreet, Inc., Fitch Investors Service, Inc., Moody's Investors Service, Inc., Standard & Poor's Corporation, and The Value Line Investment Survey provide continuing streams of statistical and other data on individual companies, as well as independent evaluations of the quality of debt issued by these companies.

At present, ratings are made and updated on close to 1,800 corporate bond issues and approximately 1,200 commercial paper issues. In addition, general credit ratings are available for over three million companies. The bond-rating agencies normally rate all issues of $5 million and over, with or without a request from the issuer. However, publication rights to the ratings rest with the issuer in some cases. Issues that generally are not rated without the request of the issuer include private placements, obligations of banks and bank-holding companies, obligations of brokerage houses, and bonds of non-U.S. corporations.

Credit ratings play an important role in U.S. financial markets. The size and diversity of borrowers and the types of debt instruments they offer make it necessary to have an impersonal credit judgment available to assist lenders and investors.

Credit ratings assist investors by providing simple indicators of credit quality. A rating is not a recommendation to buy or sell, nor does it mean that the rating agency has performed an audit. Moreover, a bond rating is not a general-purpose evaluation of an issuing corporation. Rather, a credit rating on a bond issue is restricted to that one issue, and may be higher or lower than other issues of the same company, depending on the specific protection given that class of bondholders. For example, an issuer with an AA obligation is not necessarily better than an issuer with a BB rating, since the AA rating may be based primarily on the specific security underlying one particular bond. Ratings perform the function of credit-risk evaluation, which is one element of the investment decision-making process. (See the boxes on page 7 for definitions of ratings used by two of the rating agencies.)

Rating of Bonds, Commercial Paper, and Trade Credit

In order to evaluate the changes in ratings of various types of corporate debt as they relate to financial risk and the general quality of credit, it is helpful to understand, in broad terms, how the rating agencies work. At the present time, at least four agencies publish ratings on corporate bonds. They are: Duff and Phelps, Inc., Fitch Investors Service, Inc., Moody's Investors Service, Inc., and Standard & Poor's Corporation. Two of them, Moody's and Standard & Poor's, provide ratings on corporate issues of commercial paper. Dun & Bradstreet, Inc., evaluates trade credit.

Corporate Bonds

Corporations planning to register a public-debt offering with the Securities and Exchange Commission generally will approach one or more of the rating agencies. The purpose of this contact is to get an indication of what the bond rating might be (for first-time issuers), or to ascertain the impact on existing bond ratings if the company should issue additional debt securities.

Once a formal meeting is scheduled between the issuing corporation and the rating agency, the issuing corporation provides the rating agency with detailed information concerning the financial and competitive position of the company. Generally, this information is

**Moody's Investors Service, Inc.
Bond-Rating Definitions[1]**

Key	*New Moody's*	*Former Moody's*
Best quality, smallest degree of risk	Aaa	Aaa
High quality, slightly more long-term risk than top rating	Aa1 Aa2 Aa3	Aa
Upper medium grade, possible impairment in the future	A1 A2 A3	A
Medium grade, lack outstanding investment characteristics	Baa1 Baa2 Baa3	Baa
Speculative issues, protection may be very moderate	Ba1 Ba2 Ba3	Ba
Very speculative, may have small assurance of interest and principal payments	B1 B2 B3	B
Issues in poor standing, may be in default	Caa	Caa
Speculative in a high degree, with marked shortcomings	Ca	Ca
Lowest quality, poor prospects of attaining real investment standing	C	C

[1] In April, 1982, Moody's Investors Service expanded its bond-rating categories to make them more precise. By adding numerical ratings of 1, 2 or 3 to its existing letter ratings of Aa, A, Baa, Ba and B, Moody's increased the number of possible ratings from 9 to 19.

embodied in several documents, including the prospectus and a specially prepared company presentation. Included in these presentations are a five-year historical operating record with financial statements, comparisons with similar companies, projections of future financial performance in the form of pro-forma balance sheet and income statements, and possible financing alternatives.

Upon receipt and a review of this information, the rating agency will appoint a committee to analyze the information, request any additional information required from the issuing company, and arrive at a rating. Key factors that influence industrial bond ratings are: an industry and company analysis, a detailed financial analysis of the issuing company, and examination of indenture provisions and legal aspects of the issue.

**Standard & Poor's Corporation
Bond-Rating Definitions**

Bond ratings are based, in varying degrees, on the following:

I. Likelihood of default—capacity and willingness of the obligor as to the timely payment of interest and repayment of principal in accordance with the terms of the obligation.

II. Nature of and provisions of the obligation.

III. Protection afforded by, and relative position of, the obligation in the event of bankruptcy, reorganization, or other arrangement under the laws of bankruptcy and other laws affecting creditors' rights.

AAA Bonds rated AAA have the highest rating assigned by Standard & Poor's to a debt obligation. Capacity to pay interest and repay principal is extremely strong.

AA Bonds rated AA have a very strong capacity to pay interest and repay principal and differ from the highest rated issues only in a small degree.

A Bonds rated A have a strong capacity to pay interest and repay principal, although they are somewhat more susceptible to the effects of changes in circumstances and economic conditions than bonds in higher rated categories.

BBB Bonds rated BBB are regarded as having an adequate capacity to pay interest and repay principal. Although they normally exhibit adequate protection parameters, adverse economic conditions or changing circumstances are more likely to lead to a weakened capacity to pay interest and repay principal for bonds in this category than for bonds in higher rated categories.

BB B CCC CC Bonds rated BB, B, CCC, and CC are regarded, on balance, as predominantly speculative with respect to capacity to pay interest and repay principal in accordance with the terms of the obligation. BB indicates the lowest degree of speculation and CC the highest degree of speculation. While such bonds will likely have some quality and protective characteristics, these are outweighed by large uncertainties or major risk exposures to adverse conditions.

C The rating C is reserved for income bonds on which no interest is being paid.

D Bonds rated D are in default, and payments of interest and/or repayment of principal is in arrears.

The ratings from AA to BB may be modified by the addition of a plus or minus sign to show relative standing within the major rating categories.

Source: Standard & Poor's Corporation

Commercial Paper

The commercial-paper market has undergone dramatic growth. Since 1965, the number of issuers has increased from 450 to 1,200. Between 1965 and 1981, the volume of

Standard & Poor's Corporation Commercial-Paper Rating Definitions

A commercial-paper rating is a current assessment of the likelihood of timely payment of debt having an original maturity of no more than 270 days. Ratings are graded into four categories, ranging from A for the highest quality obligations to D for the lowest. The four categories are:

- A Issues assigned this highest rating are regarded as having the greatest capacity for timely payment. Issues in this category are further refined with the designation 1, 2 or 3 to indicate the relative degree of safety.
  - A-1 This designation indicates that the degree of safety regarding timely payment is very strong.
  - A-2 Capacity for timely payment on issues with this designation is strong. However, the relative degree of safety is not as overwhelming as for issues designated A-1.
  - A-3 Issues carrying this designation have a satisfactory capacity for timely payment. They are, however, somewhat more vulnerable to the adverse effects of changes in circumstances than obligations carrying the higher designations.
- B Issues rated B are regarded as having only an adequate capacity for timely payment. However, such capacity may be damaged by changing conditions or short-term adversities.
- C This is assigned to short-term debt obligations with a doubtful capacity for payment.
- D This rating indicates that the issue is either in default or is expected to be in default upon maturity.

paper outstanding has increased from $15 billion to $160 billion.

The approaches used in arriving at ratings by the different rating agencies are similar. Commercial-paper ratings are based on an evaluation of the borrowing company's management, and on a detailed financial analysis. While the optimal balance sheet and income statement for an issuer depends on the industry and type of business involved, key requirements include adequate liquidity, an upward trend in earnings, and the ability to borrow to meet unexpected cash needs.

Each rating agency grades borrowers according to its own classification system. Moody's Investors Service, Inc. (Moody's) uses a P-1, P-2, and P-3 rating scale, with P-1 being the highest rating. Standard & Poor's Corporation (S&P) uses a slightly different classification system, which is outlined in the box above. Late in 1981, S&P modified its top category rating so that a subcategory of A-1+ is now used. At the time, S&P indicated that close to 500 companies qualified for the new rating.

A company must be in a strong financial condition to obtain an A rating from S&P, or a P (prime) rating from Moody's. Because investors in commercial paper tend to be very conservative, the market tends to be less receptive to issues rated A-3 and P-3. As an aftermath of the Penn Central crisis in 1970, the subsequent emphasis on commercial-paper ratings, and further possible distinctions between A-1 paper based on the issuing corporation's bond ratings, interest-rate tiering has developed in the market. This means that different issues will pay different interest rates within a given rating. The rating of commercial paper requires very specialized approaches because corporations from many different industry sectors now issue commercial paper.

While rating agencies may generally expect corporations to maintain bank credit lines equal to all commercial paper outstanding, there are exceptions to this rule. For example, some corporations use commercial paper strictly to finance seasonal needs, with commercial paper outstanding for only two to three months during the year. Also, in cases of exceptionally strong credits, borrowers may cut back bank lines to a percentage of peak commercial-paper borrowings.

Trade Credit

Dun & Bradstreet, Inc. (D&B) provides credit ratings for more than three million companies. These ratings are updated on a 60-day cycle basis. The D&B rating system follows the format of combined letter and numerical

Dun & Bradstreet, Inc. Credit-Rating Classifications

Letters give capital rating and denote estimated financial strength of the business. The numbers stand for the composite credit appraisal of the business based upon information contained in the *Business Information Report.*

Estimated Financial Strength	*Composite Credit Appraisal*			
	High	*Good*	*Fair*	*Limited*
5A over $50 million	1	2	3	4
4A $10 million to $50 million	1	2	3	4
3A $1 million to $10 million	1	2	3	4
2A $750,000 to $1 million	1	2	3	4
1A $500,000 to $750,000	1	2	3	4
BA $300,000 to $500,000	1	2	3	4
BB $200,000 to $300,000	1	2	3	4
CB $125,000 to $200,000	1	2	3	4
CC $75,000 to $125,000	1	2	3	4
DC $50,000 to $75,000	1	2	3	4
DD $35,000 to $50,000	1	2	3	4
EE $20,000 to $35,000	1	2	3	4
FF $10,000 to $20,000	1	2	3	4
GG $5,000 to $10,000	1	2	3	4
HH up to $5,000	1	2	3	4

STANDARD & POOR'S CREDITWEEK

CreditWatch

CreditWatch highlights potential changes in ratings of bonds and other fixed income securities. It focuses on events and trends which place companies and government units under special surveillance by S&P's 120-member analytical staff. These may include mergers, voter referendums, actions by regulatory authorities or developments gleaned from analytical reviews. Unless otherwise noted, a rating decision will be made within 90 days. Issues appear on CreditWatch where an event, situation or deviation from trends occurred and needs to be evaluated as to its impact on credit ratings. A listing, however, does not mean a rating change is inevitable. Since S&P continuously monitors all of its ratings, CreditWatch is not intended to include all issues under review. Thus, rating changes will occur without issues appearing on CreditWatch.

ratings. The letter gives a capital rating and denotes the estimated financial strength of the business firm. The number stands for the composite credit appraisal of the business based upon information contained in the *Business Information Report* (published by D&B). The D&B ratings in use are reproduced in the box on page 8.

Factors used by D&B in arriving at composite credit ratings include the ability of the company to make debt payments promptly, financial position of the company, operating history, and prior experience of the company and principal officers in conducting business.

The information provided by Dun & Bradstreet, Inc., is used by firms that provide commercial credit to their customers, as well as by lenders seeking to obtain a better insight into the credit standing of potential borrowers.

Early Warning System

In November, 1981, Standard & Poor's Corporation introduced an "early warning" service to call attention to potential credit problems and the possibility of credit rating changes. In that month, S&P initiated publication of an early warning list of companies and governmental units whose bonds and short-term securities are under special surveillance. The list is titled *CreditWatch*, and is updated weekly.

CreditWatch was initiated in response to an increasing incidence of credit-rating changes of corporate bonds, brought on, in part, by rising interest rates and growing debt-service burdens. *CreditWatch* reflects growing investor concern over the creditworthiness of corporations and municipalities during a phase of the business cycle that has been accompanied by sharp swings in the economy and in interest rates, and by declining profitability of basic industries (steel and automobiles).

S&P notes that a *CreditWatch* listing does not necessarily mean a decline in the credit quality of a company's bonds. Some companies are listed where the potential credit implication is positive. Moreover, some companies are listed because of the possibilities of their entering into a merger. In such cases, the merger could impose increased demands on the acquired unit, or substantially change the degree of borrowing and financial leverage of the acquiring company.

Changes in Ratings as an Indicator of Financial Risk

Corporate credit quality has shown a decline in recent years, as evidenced by changes in bond and commercial-paper ratings. Rating changes on corporate bonds and commercial paper provide additional insight into possible changes in the level of financial risk. Table 1 was constructed by reviewing Moody's and Standard & Poor's publications in which bond and commercial-paper ratings and rating changes are published. The data in the table point clearly to an increase in financial risk over the period 1978 to 1981:

Table 1: Changes in Bond and Commercial-Paper Ratings

	Bond Rating Changes		*Commercial-Paper Rating Changes*		*Total*
Half-Year	*Up*	*Down*	*Up*	*Down*	*Changes*
1978 I	15	19	4	5	43
1978 II	11	8	3	5	27
1979 I	18	24	3	6	51
1979 II	17	18	5	7	47
1980 I	12	27	3	21	63
1980 II	25	38	6	13	82
1981 I	15	50	5	13	83
1981 II	26	32	8	19	85

(1) In all but one half-year, downward rating changes have exceeded upward rating changes.

(2) On an annual basis, there was a progressive increase in the overall number of rating changes in bonds and in commercial paper, over the period 1978 to 1981.

(3) The margin of annual downward changes over upward changes increased and reached a high for bonds in 1981 and for commercial paper in 1980.

Credit Losses and Business Failures as Indicators of Financial Risk

The incidence of credit loss is another indicator of a change in credit quality. Probably the most comprehensive series of data available in this area are those published by Dun & Bradstreet, Inc. The D&B series tends to confirm the slippage in credit quality noted previously.

The data on business failures include four series that broadly measure the credit strength or weakness of major sectors of business. These series include:

(1) Number of failures
(2) Total failure liabilities
(3) Failure rate per 10,000 listed concerns
(4) Average liability per failure

It should be noted that failures include those businesses that ceased operations following bankruptcy, foreclosure, receivership or reorganization (see the accompanying box). Failures do not represent total business discontinuances. A business may discontinue operations and pay creditors in full. In that case, the concern is not included in any of the business failures data.

Total failures liabilities include all accounts payable, notes payable, and other current liabilities. Long-term publicly held debt obligations are not included. Table 2 records various data on business failures and liabilities since 1969.

Definition of Business Failures and Their Liabilities

Business Failures include businesses that ceased operations following assignment or bankruptcy; ceased with loss to creditors after such actions as execution, foreclosure or attachment; voluntarily withdrew leaving unpaid obligations; were involved in court actions such as receivership, reorganization or arrangement; or voluntarily compromised with creditors.

Liabilities of Failures include current liabilities, and have a special meaning: They include all accounts and notes payable and all obligations, whether in secured form or not, known to be held by banks, officers, affiliated companies, supplying companies, or the government. Long-term publicly held obligations are not included, and offsetting assets are not taken into account.

D&B also publishes information on the causes of business failures. In the analysis covering failures during 1979, lack of experience and incompetence represented

Table 2: Record of Business Failures and Liabilities of Business Failures

Selected Years	*Number of Failures*	*Failure Liabilities ($ Million)*	*Failure Rate per 10,000 Listed Concerns*	*Average Liability per Failure*
1969	9,154	$1,142	37	$124,767
1971	10,326	1,916	42	185,641
1973	9,345	3,298	36	245,972
1975	11,432	4,380	43	383,150
1977	7,919	3,095	28	390,872
1978	6,619	2,656	24	401,270
1979	7,546	2,667	28	352,639
1980	11,742	4,635	42	394,740
1981[a]	7,883	2,989	57	379,200

[a] Reflects data for first half of year only
Source: Dun & Bradstreet, Inc.

Table 3: Causes of Business Failures—1979

	Industry Group					
Cause	*Manufacturers*	*Wholesalers*	*Retailers*	*Construction*	*Commercial Services*	*All*
Inadequate sales	49.9%	50.4%	56.7%	49.6%	46.8%	52%
Heavy operating expenses	37.8	31.6	23.0	31.8	31.7	29
Receivables difficulties	16.6	18.5	3.7	13.5	8.3	10
Inventory difficulties	7.4	13.6	14.4	1.3	1.6	9
Excessive fixed assets	4.4	1.5	3.0	2.0	4.7	3
Poor location	0.4	0.8	4.4	0.4	1.2	2
Competitive weakness	24.5	21.9	24.9	34.0	25.2	26
Other	2.0	2.0	1.6	1.7	1.6	2

Source: Dun & Bradstreet, Inc.

the largest percentage of causes of failures (96 percent). Those failures caused by lack of experience and incompetence were further explained by more detailed analysis (Table 3.) While none of the detailed explanations of causes of failures specifically points to excessive debt or debt-servicing costs, it is possible, nevertheless, to draw some inferences concerning the role of debt.

Excessive debt or debt-servicing costs can be associated with excessive investment in assets if additional investment in assets requires additional debt. There are three categories in the table on causes of failures that reflect excessive investment in assets. These include receivables difficulties (10 percent of firms that failed); inventory difficulties (9 percent); and excessive fixed assets (3 percent).

Excessive debt or debt-servicing costs can be associated with inadequate sales volumes that fail to generate cash flows sufficient to permit comfortable debt servicing. In 1979, 52 percent of all firms included in the analysis of causes of failures experienced inadequate sales.

Perceptions of Financial Risk by Corporate Executives

AS DEMONSTRATED in the preceding sections of this report, there has been a notable increase in the degree of financial risk to which the corporate sector is exposed. A shortcoming of the data that have been presented, however, is that they represent averages to a great extent. And, averages can be deceptive. To help in overcoming this drawback, and to gain some insights into the behavior of company managements in the face of increasing financial risk, a survey of 50 companies was conducted.

These 50 companies are included among the 200 companies whose financial ratios were used earlier in this report, in the analysis of trends in financial ratios. They are substantial in terms of resources, and have issued stocks and bonds that are listed and traded on the New York Stock Exchange. The majority of these companies are engaged in manufacturing (Chart 1), and, among these, durable goods manufacturers (24 companies) outnumber nondurable goods manufacturers (19 companies). All size categories are represented (Chart 2), although companies with sales in excess of $500 million account for 34 of the 50 companies. Twenty-one companies have obtained funds by sales of bonds during the past two fiscal years. The median amount of bond financing was $100 million.

Recent Increases in Financial Risk

Financial executives of the participating companies were asked to indicate whether they believed that their

Chart 1: Industry Classification of 50 Surveyed Companies

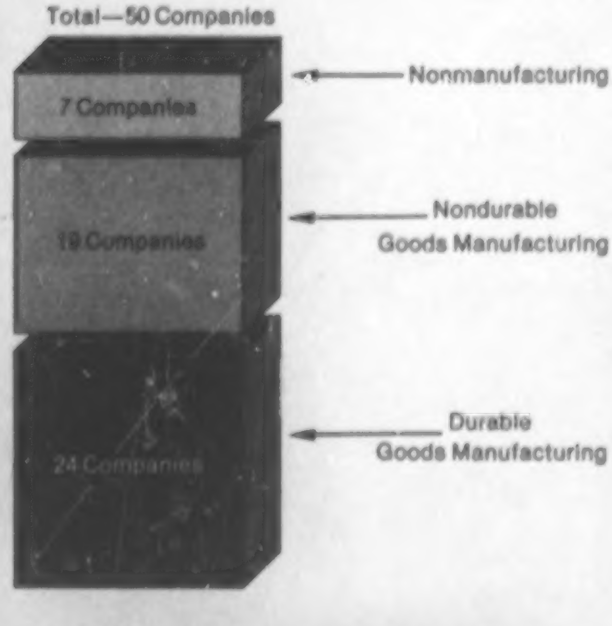
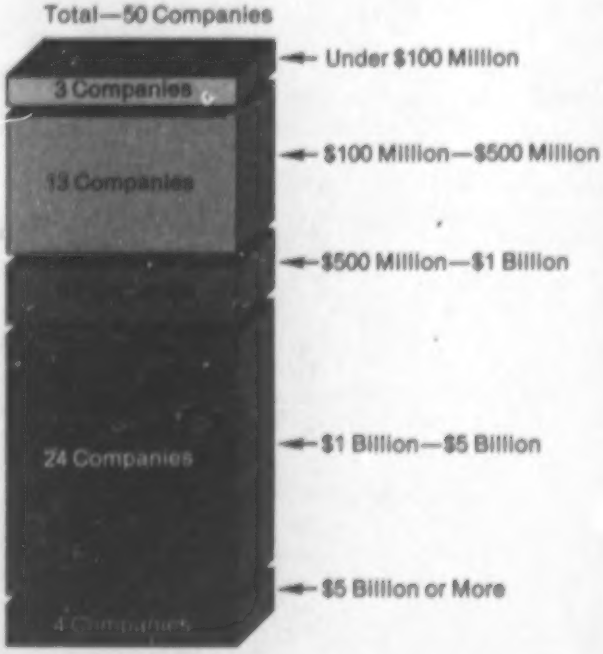


Chart 2: Classification of 50 Surveyed Companies, Based on Annual Sales



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exposure to financial risk increased, decreased or remained the same during the period 1979 to 1981. Twenty-seven responded that financial risk had increased, eight said it had decreased, and fourteen indicated that financial risk had remained about the same. (One did not reply to this question.)

The eight companies that perceived a reduction in financial risk represent a cross section of industries, and range in size from approximately $100 million to nearly $4 billion in total sales. Only two of the eight companies have made recent use of sales of bonds to obtain funds, and, in each case, the amount involved was less than $50 million—well under 2 percent of total corporate resources.

The 27 companies that perceived an increase in financial risk during the period 1979 to 1981 also represent a cross section of industries that ranged across all size categories, as measured by total sales. There is a high concentration of large companies, with 16 of the 27 (60 percent) in the two largest categories (sales in excess of $1 billion).

One might expect a close relationship between company perceptions concerning financial risk and whether such companies resort to borrowing. In the case of the 27 companies that perceived an increase in financial risk, 15 (56 percent) currently or recently have engaged in bond financing. As previously noted, in the case of the eight companies that perceived a reduction in financial risk, only two currently or recently engaged in bond financing. In the case of the 14 companies that perceived no change in financial risk, only four (29 percent) engaged in recent bond financing.

Considering the 12 companies that reported an increase in financial risk but have not engaged in bond financing recently, it is interesting that more than half of these companies have a ratio of long-term debt to equity in excess of 20 percent, and that more than half of these companies have experienced an increase in this ratio over the past five years. In addition, one out of four of these companies has substantial debt-service burdens, with interest expense in excess of 25 percent of pretax profits.

By contrast, companies that perceived a reduction in financial risk generally have not been borrowing in the capital markets, have been reducing outstanding debt, and have a downward trend in the ratio of interest expense to pretax profit. The following statement by the chief financial officer of a manufacturer of glass and packaging products illustrates these relationships:

> "Our company is in the unique position of being able to reduce debt, thereby reducing financial risk. A few years ago, we decided to take drastic action until we got our house in order. We are a net cash investor, not a borrower. In our priorities, cash flow takes precedence over earnings."

Factors that Influence Financial Risk

The 50 respondents were asked to identify the factors they believe have caused changes in financial risk. Their replies are summarized in Table 4 where these factors are ranked in the order of importance assigned by the respondents.

On an overall basis, high interest rates, the drying up of the bond market, and fluctuating interest rates were cited the three most important factors influencing a change in financial risk. Thus, as a group, the 50 cooperating respondents ranked conditions in the credit markets as the primary set of factors bringing about a change in financial risk in the period 1979 to 1981. The second most important set of factors bringing about a change in financial risk in the same period was susceptibility to variation in internal financial conditions.

Examining the rankings of these same factors as reported by companies that perceived a reduction in financial risk reveals several differences from other companies. Companies that noted a reduction in financial risk ranked fluctuating interest rates as the sixth most important factor, as compared with the third rank accorded it by other companies. The reason is that most companies experiencing a reduction in financial risk have been debt repayers rather than borrowers.

A point of similarity between companies that perceived a reduction in financial risk and those that saw no change is that both groups assigned the same rank to weak growth in internal cash flow. Companies that perceived an increase in financial risk ranked a weak growth in internal cash flows higher in importance. In the case of companies that experienced a reduction in financial risk, a weak growth in internal cash flows might have led to more conservative financing policies aimed at reducing the relative incidence of debt and related-interest expense. The successful execution of these more conservative policies would, of course, result in a reduction in financial risk.

A final point to comment on is the difference in rank assigned to excessive debt (ranked fifth by all companies, seventh by companies perceiving increased financial risk, and third by companies perceiving a reduction in financial risk). In the case of companies that perceived a reduction in financial risk, the relatively high ranking squares with these companies' general reduction in debt as a policy objective.

Management Responses to Financial Risk

Corporate financial managers have at least three major goals in mind when they attempt to manage and control the financial risks to which their companies are exposed. First, they seek to establish financial performance yardsticks that will measure the acceptable levels of financial risk in light of the firm's strategic plans and

Table 4: Factors Influencing Changes in Financial Risk

Factors (in rank order of assigned importance)	*Assigned Rank by Companies Perceiving*		
	Increase	*Decrease*	*No Change*
High interest rates....	1	2	1
Drying up of bond markets...........	4	1	2
Fluctuating interest rates	3	6	3
Weak growth in internal cash flow ..	2	4	4
Excessive debt.......	7	3	7
Inferior financial ratios	5	5	9
Inadequate bond interest coverage...	6	—[a]	6
Weak borrowing position...........	11	9	8
Other[b]..............	8	—[a]	12
Takeover problems ...	10	7	11
Liquidity problems....	12	8	5
Financial reporting problems..........	9	—[a]	10

[a] The eight companies perceiving reduced financial risk did not mention this factor as contributing to a change in financial risk.

[b] Responses include uncertainty of inflation, size of budget and cash flow, and poor operating results.

objectives. Second, they strive to meet rating-agency requirements so as to maintain credit ratings on bonds, commercial paper, and trade credit relationships. Third, they attempt to demonstrate to lenders and investors that internal management controls are operating in a manner that permits realization of financial targets and maintenance of overall debt quality.

Considerations that enter into the picture with respect to how corporations attempt to realize these goals include the following:

(1) Control of financial risk is one aspect of a broad system of financial planning and control. These other aspects include strategic planning, budgeting and forecasting, working capital management, capital budgeting, and control over borrowing and funds sources. Development of an integrated system of financial planning and control requires that detailed consideration be given to control over financial risk.

(2) Analysis and control of financial risk provides the corporation with an important ingredient in its control over all other types of risk (including credit risk, business risk, and foreign investment risk).

(3) Effective control over financial risk widens the range of potential sources of funds available to borrowers.

(4) Effective control over financial risk results in a higher market valuation of a corporation's securities. A by-product of this is that the corporation tends to gain greater protection against unexpected takeover bids.

Financial management practices can have a significant influence on these goals and considerations. The 50 responding companies in the Board's survey were asked to indicate the measures they found most important in controlling financial risk. Also, they were requested to rate the importance of various measures they have adopted in maintaining credit ratings. In addition, they were asked to state whether financial market conditions or company internal measures are more important in maintaining or improving debt ratings. Finally, they were requested to report any significant recent changes in bond-indenture provisions.

The 50 companies follow a number of policies and practices designed to limit or minimize financial risk. The relative importance of these measures is indicated by the rankings in Table 5. The ten types of measures employed fall into four distinct categories: measures to control

Table 5: Measures Used by Companies to Minimize Financial Risk

	Goals			
Policies and Practices (in Order of Importance)	*Control Debt*	*Control Interest Expense*	*Efficient Asset Use*	*Profit and Cash Flow*
Increase efficiency of asset management and increase cash flow			X	X
Maintain conservative debt ratio	X			
Improve financial forecasting and budgeting for better use of funds			X	
Establish minimum standard for interest and overall debt-service coverage............		X		
Establish minimum liquidity standards			X	
Establish monetary limit on total debt	X			
Establish monetary limit on short-term debt.................	X			
Refund debt at lower interest rate when possible	X	X		
Other (improve company profit margins)............				X
Establish a monetary limit on total interest expense		X		

debt, measures to control interest expense, measures to increase the efficiency of asset use, and measures to improve profit and cash flow.

These rankings focus primarily on what corporate management is able to implement. In addition, companies were asked to comment on the attitudes of credit-rating agencies concerning measures that are important in maintaining or improving company debt ratings.

Survey cooperators believed that maintaining or improving profitability is first in importance in the eyes of credit-rating agencies. The reasons are that high profitability reduces the need for extensive debt financing during periods of high asset growth, provides cash flows needed for debt service, and permits stockholders' equity to grow in relation to debt. Ranked second in importance is the maintenance of adequate debt-service coverage. The companies ranked the maintenance of a satisfactory stockholders' equity cushion in relation to debt third in importance. The other three measures among the first six were: maintaining adequate liquidity; maintaining bank credit lines; and successfully bringing new investment on-stream.

On an overall basis, the 50 responding companies assigned high importance to internal measures in maintaining or improving company debt ratings. Finally, they indicated that bond-indenture provisions have changed very little in recent years to give more protection to investors.

When asked to comment on the effects of off-balance-sheet financing (e.g., leasing) on company credit or debt ratings, most respondents (27) reported that there are no noticeable effects; 13 reported they have not used off-balance-sheet financing. The other ten respondents volunteered reasons for not using this method of financing.

Typical comments pertaining to off-balance-sheet financing are:

"Financial institutions incorporate these effects in their overall analysis."

—Treasurer of a retail food chain

* * * *

"Our capital asset requirements do not lend themselves to extensive or leveraged leasing."

—Treasurer of an electrical and consumer products manufacturer

* * * *

"Even under the new tax and leasing laws, we should probably continue to buy assets, not lease them."

—Financial manager of a diversified manufacturer of durable products.

The Outlook for Financial Risk

The surveyed companies were asked to indicate whether they expect any changes in financial risk exposure over the period 1982 to 1985. Of those responding:

- 15 expect an increase in financial risk;
- 14 expect a decrease;
- 14 expect no change.

Table 6 provides a comparison of company perceptions concerning financial risk for the two periods 1979 to 1981 and 1982 to 1985. Of the 43 companies reporting for both periods, 12 had the same perceptions of changes in financial risk: Seven expected financial risk to increase in both periods; five companies expected no change in risk in both periods.

Seven companies that had perceived increased risk for the earlier period expect this trend to continue (Table 6). Their comments ranged from concern over the need to borrow to finance capital expenditures to expectations that the economic environment will remain difficult. The comments of two large-size durable goods producers are typical:

"We expect a difficult economic environment and, therefore, pressure on earnings and continued high interest rates."

"Large capital expenditures for the next five years will require some borrowing."

Similarly, a large manufacturer of nondurable goods noted:

"Unless we improve on profit margins, we will not be able to finance the growth in our business from internal sources (excluding sale of assets)."

Comments made by the five companies perceiving no change in financial risk in both periods assumed a

Table 6: Changing Perceptions of Financial Risk

Company Perceptions Covering Period	*Company Expectations for Period 1982 to 1985*			
1979 to 1981	*Increase*	*Decrease*	*No Change*	*Total*
Perceive Increased Financial Risk (27 Companies)	7	13	6	26
Perceive Decreased Financial Risk (8 Companies)	2	0	3	5
Perceive No Change in Financial Risk (14 Companies)	6	1	5	12
Total	15	14	14	43

favorable turn in the economy. The following comment by a construction materials manufacturer is illustrative:

"We expect business conditions to improve, resulting in a sufficient improvement in earnings and cash flow to service any debt created."

An aerospace manufacturer commented:

"Although we may have to pay more for our borrowed money in the years ahead, this increased expense will not have a tremendous impact on our bottom line since we are not heavily leveraged. Thus, our credit rating should remain strong, and we should be relatively immune from the problems of a credit crunch—should one come."

As against the 12 companies that held to the same perceptions concerning exposure to financial risk in both periods, 31 companies expected changes. The largest shift in attitude is among a group of 13 companies that perceived increased financial risk in 1979 to 1981 but predicted decreased financial risk in 1982 to 1985. These 13 companies cover all size and industry categories. Among nondurable goods manufacturers, the explanations for reduced financial risk in the near future include better control over investment and working capital requirements, and an improvement in the economy that will lead to increased earnings and cash inflows. Among durable goods manufacturers, explanations for reduced financial risk include improved financial ratios and improved internal cash generation. One manufacturer of construction and agricultural equipment noted:

"We anticipate improved demand in the markets which we serve, which will result in improved income for the company. Also, we believe interest rates will decline from their 1981 peaks to more realistic levels, although not to historical lows. The 8-percent, 25-year debenture is a thing of the past."

Thirteen companies that perceived increased financial risk in 1979 to 1981 expect reduced financial risk in the future. Six companies that perceived increased financial risk in the earlier period expect no change in financial risk in the future. Ranging in industry categories from steel, housewares and instruments to industrial plant monitoring equipment, these companies offer various explanations for expecting no change in financial risk in the future. One of the smaller sized companies in this group of six noted:

"While expansion will require additional financing, it is anticipated that improved economic conditions will enable our company to finance its needs via improved cash flow."

None of the companies that perceived decreased financial risk in 1979 to 1981 expect decreased financial risk in 1982 to 1985. Two of these expect increased financial risk in the future period. One of these companies offered the explanation that there will be "increased use of debt because of internal expansion and possible acquisition activities." Three companies that perceived decreased financial risk in the last three years expected no change in the next four years. A nonmanufacturing firm attributed this opinion to an improvement in fixed-charge coverage. A capital goods manufacturer explained that its financial needs should be satisfied with internal funds and that the debt/equity ratio should improve.

Six of the companies that perceived no change in financial risk in 1979 to 1981 expect an increase in financial risk in 1982 to 1985. This group includes companies producing electrical products, pharmaceuticals, capital equipment, housewares and industrial products. Explanations offered for the expected increase in financial risk included possible acquisitions, and the need to borrow large amounts due to inflation and expanding markets. According to a large durable goods manufacturer:

"The bond market has almost disappeared. We have heavy maturities coming due on existing long-term debt."

Finally, one company that reported no change in financial risk in 1979 to 1981 expected a reduction in financial risk in 1982 to 1985. This information-oriented firm that engages in nondurable goods manufacturing noted:

"We expect a significant improvement in our working capital and liquidity position. This will be generated from internal funds."

* * * * *

To sum up: Many companies are concerned with financial risk and its implications for their day-to-day financial activities. A majority of the companies surveyed perceive that financial risk has already increased, or will do so in the future. Some companies that report no increase or a reduction in financial risk are able to do so because of austerity or other financial management policies implemented in the recent past. Companies concerned with increased financial risk also have taken measures to strengthen their financial position. These include measures to control debt, to improve profit and cash flow, to improve on efficient use of assets, and to control interest expense.

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Top-Management Staffing Challenges:
CEO's Describe Their Needs

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The Conference Board

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Today's Top-Management Staffing Challenges

Chief executives of major corporations often speak of two basic goals when in comes to staffing senior management positions:

- Planning to ensure the successful operation of the company during their own tenure as leader; and
- Longer range planning to lay the necessary groundwork for continued success of the enterprise beyond their own term of office, including, if possible, the development of strong candidates for possible succession as the next chief executive of the organization.

Once—back during the 1950's and 1960's—the simultaneous pursuit of these two goals seemed relatively easy and harmonious, for those were times in which the continuous growth of most U.S. businesses seemed virtually assured. The company's longer run future seemed merely an enlarged version of its past, so all of the top executives, including the CEO, felt free to focus most of their attention on operational problems and concerns relating to orderly, sustained growth. Thus, when it came to defining future top-management staffing needs, it was usually assumed that executives with much the same kinds of skills and abilities as those generally represented in the present, obviously highly successful, top-management group would always be needed.

In the single-business companies these top-level staffing requirements translated into:

(1) the need for senior-level executives who understood and could effectively manage the operation of each of the major functions (production, marketing, finance, etc.) of the business;

(2) the need for senior-level executives who could effectively work together with the CEO to integrate those major functions in a balanced, continuously expanding business by developing broad, companywide policies and business plans;

(3) the need for appropriately qualified candidates for ultimate leadership succession—a leader for an anticipated time of even greater profitable expansion.

The strategy that was usually tried first was: (1) to select the most able functional people for top-management slots, followed by (2) building teamwork among the top managers (committee work, a President's office, etc.), and then (3) broadening the perspective of each functional head with a view to preparing potential CEO candidates. This strategy did not work too well. In most companies it did not produce an adequate number of executives who demonstrated general management skills or who functioned well as true general operating managers.

As a result, many CEO's of such companies decided to try to start the process of general-manager development earlier in the careers of potential top managers. They adopted a developmental strategy of moving high-potential managers through a series of progressively broader and more demanding managerial job assignments spanning several of the key functions of the business. By the time these executives reached the top, it was hoped they would have mastered a generalized management and control approach to running every functional part of the business and would also have gained such a broad perspective of the operations of the business as a whole that they would routinely give balanced and coherent consideration to the needs of all the various functions. In short, by the time they reached the top, even though they then headed specific operating functions, they would all be thinking and acting very much like *general operating managers*—like potential CEO's.

CEO's of multibusiness companies were able to carry the process of developing general operating managers one step further. By divisionalizing, these companies created a number of profit centers—each a smaller integrated business headed by a true general operating manager. Because the heads of these units had actual experience serving as general operating managers, these executives were seen as a highly qualified pool of candidates with demonstrated competence to become the next chief executive or chief operating officer for the company as a whole. Indeed they seemed even better *qualified* than the senior functional executives.

There tended to be virtually continuous profitable growth in most companies' lines of business during this period, so it was relatively easy to assume that the development of good general operating managers was not only necessary, but also sufficient, for the development of all the company's highest level executives. Indeed, in some companies the myth developed that a really good general manager should be able to manage the profitable growth of virtually any kind of business.

By the beginning of the 1970's, the business environment had begun to change sufficiently to call such a sweeping generalization into serious question. From experience, it became clear that managing different kinds of businesses required different functional emphasis, different knowledge, and different skills. It also became clear that, because of external factors well beyond the control of any business manager, different kinds of businesses had different growth prospects. Moreover, it was recognized that different managerial strategies might well be called for at different stages in what might be regarded as natural phases in the life cycle of any business.

Such information had important implications when it came to forecasting the special kinds of competence that would be needed in future top-management groups. It also made it apparent that top management needed to give continuing attention to the nature of the changes that were occurring in the environment for the company's business(es) so that the company could respond in a timely manner.

Moreover, the fact that whatever business(es) had once been the key to a company's profitable growth would one day be of waning profitability and importance drove home an especially important overall message. As times change, so must the company change by redefining the nature of its basic businesses and by planning toward a quite different company of the future.

By the 1980's, top managers began to see their essential role not merely as managing the orderly efficient operation of the existing organization but also as simultaneously managing continuous and discontinuous forms of change. Profitable growth in harmony with a rapidly changing, indeed often turbulent, business environment calls for a top management prepared to change directions and strategy whenever conditions demand it.

From the giant AT&T down the scale to considerably smaller firms, companies in a wide variety of industries are finding that they need to redefine their basic businesses. At the same time, they find it necessary to revamp their organization structures, revise their managerial processes and systems, rethink the basic nature of their top management positions, and reconsider how best to meet both present and future top-management staffing needs. And they often need help in deciding how to do all this.

Mindful of all these developments and changes, and seeking to help companies learn from each other through candid exchanges and evaluations of both the favorable and the problematic aspects of their experiences, The Conference Board conducted a personal survey of chief executives in a broad range of major U.S. corporations to learn their assessments of the key changes and challenges they foresaw with respect to top-management staffing during the next three to five years.

What was found? First, the CEO's were not prepared to wait. They said they wanted the current group of top managers to be able to deal with the new realities. They also wanted to make sure that appropriate adjustments would be made in the development of their successors.

In particular, the CEO's stress the need for the top-management group to develop a strategic business-planning perspective. Just what they mean, beyond the recognition that their top subordinates need a capacity to manage change is not clear. But one thing it does seem to imply is a need for top management to shift its planning perspective from inside to outside the company—planning the company's role in the context of the larger, changing environment in which the company will operate in the future. By involving their top-management executives in a reexamination of the unique mission and capabilities of the organization and of the underlying dynamics of its relationships to the changing environment, these CEO's hope that their top-level executives will be able to help them identify and take best advantage of significant opportunities for profitable growth.

Many of the CEO's forecast much greater diversity in the kinds of businesses that will very shortly be included under the company's umbrella—diversification that will often be achieved through important mergers or acquisitions. They stress the need for the top-management group to learn how to manage this greater range of different kinds of businesses effectively.

The CEO's also highlight some of the key considerations they believe should receive special emphasis in choosing the next CEO and lay out some of the strengths and weaknesses they have discovered in their current management succession and development planning approaches.

What emerges is by no means a rejection of past executive selection and development approaches. Rather, there is an awareness of changing times and of a growing expertise in how to fit top-management staffing processes to *tomorrow's* special needs and opportunities. By drawing more people at various organization levels into a continuing process of formulating and implementing strategic plans, some CEO's hope for better plans, less painful implementation, and a company that will go forward in closer harmony with the changing outside world. They also hope to inspire a zest for managing change.

The CEO Survey

In the Spring of 1981, The Conference Board launched a major research program in the area of top-management staffing. The first step has been to find out from chief executives what their company's top-level staffing needs really are. An eight-page questionnaire was sent to the CEO's of most major U.S. corporations asking them for their personal views of the key changes and challenges their companies face in top-management staffing over the next three to five years. All told, 432 of the 1,350 CEO's contacted responded. The response was sufficiently representative to make possible analysis of the data by broad industry categories—manufacturing, banks, insurance companies, retailing and gas and electric utilities—and also by size of company in some industries (manufacturing, banks and insurance). (See box.)

We limited our questions to those that only the CEO could answer:

- Who is in top management now?
- Who will be top management in three to five years?
- What is the general outlook for your company over the next three to five years?

About the Research Program

The CEO survey questionnaire was sent to:

- The 1,000 largest manufacturing companies (*Fortune's* industrial lists);
- The 50 largest and the 101st to 150th largest banks (*Polk's* list);
- The 50 largest and the 101st to 150th largest insurance companies (*Best's* list);
- The 100 largest retailing companies (*Newsfront's* list on a nonduplicative basis);
- The 50 largest gas and electric utilities (*Fortune's* list).

The distribution of respondents to the survey was:

	Number Responding	*Percent Responding*	*Percent of Total Response*
Manufacturers			
500 Largest	161	32%	37%
Next 500	138	28	32
Total	299	30%	69%
Banks			
50 Largest	21	42%	5%
50 Medium Large	19	38	4
Total	40	40%	9%
Insurance			
50 Largest	23	46%	5%
50 Medium Large	19	38	4
Total	42	42%	10%
Retailing—100 Largest	27	27%	6%
Utilities—50 Largest	24	48%	6%
Total	432	32%	100%[a]

[a] Details do not add up to 100 percent due to rounding.

Two participative research seminars were also held with CEO's who had responded to the survey or senior level executives whom they designated. The seminars helped to clarify some of the survey responses. They also provided an opportunity to share information on planning for management succession and development.

- What are the key challenges you foresee with respect to the top-management group during the next three to five years?
- How will your company choose its next CEO? and
- What are your views on the company's management succession and development planning?

Key findings on these topics are summarized in this report. The CEO survey results are presented in greater detail by industry, size of company, and top-management model in the Appendix and in an earlier report.[1]

The CEO's assessments of the outlook for their companies confirm that we live in turbulent times and that their top-management staffing needs are changing rapidly. In most companies the top-management team will need to learn many important new plays in a very short time. Indeed, some teams may need to master a totally different ball game almost overnight. Important changes will obviously be needed in the way major U.S. corporations select and develop their key executives.

Who Is in Top Management?

This is, of course, a very basic question when it comes to determining top-management staffing needs. There are no "outstanding executives" in the abstract; there are only outstanding executives for certain specific kinds of top-management positions. Most people would agree that the "top management" of a company consists of the select group of executives with major responsibility for charting the course of the business and for key decisions that affect the overall success of the firm. Everyone seemed to be assuming there was general agreement on who that would be, and that the size and composition of the top group would be much the same from firm to firm. The survey provided an opportunity to find out directly from CEO's how they conceptualized their own companies and their prime movers. When they were pinned down by questions about the size and composition of *their* top management group, the answers varied widely from company to company.

The Size of the Top Groups

Almost a quarter of the CEO's of these major U.S. corporations say that, counting themselves, their top-management group consists of somewhere between three and five executives; just over half say the top-group includes between six and ten executives; 14 percent say somewhere between eleven and fifteen executives; and 12 percent say sixteen or more executives. Despite the wide range of top-group sizes the CEO's reported, there is a heavy concentration in the six to ten size category. Regardless of industry or size of company, the usual top-management group in a major U.S. company is made up of about eight executives—give or take a couple.

The Composition of the Top Group

In addition to the CEO, there is almost always another general operating officer for the *whole* company—a president, an executive vice president, a chief operating officer (the position of this other general operating officer varies with the position held by the CEO). There is also almost always a top financial executive.

The representation of other kinds of executives varies widely. It varies, first of all, with the size of the top group. (If there are only three to five executives whom the CEO considers to be in top management, there is not much room for anyone other than the virtually universal three top executives referred to above. But if there are 16 or more top slots available, then many different kinds of executives can be included.) For example, depending upon the size of the top group, the representation of general operating managers who are in charge of certain business-related *parts* of the company—say, certain product divisions or subsidiaries—runs from 37 percent in the smallest top groups to 90 percent in the largest top groups. And, as another example, the representation of the top human-resource executive runs from 17 percent in the smallest top groups to 80 percent in the largest ones.

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[1] Ruth G. Shaeffer and Allen R. Janger, *Who Is Top Management?* The Conference Board, Report No. 821, 1982.

There are also variations by industry in the kinds of executives included in top management. For example, the CEO's of manufacturing firms and banks are more likely to include some general operating managers in charge of certain business-related *parts* of the company in their top managements than are the CEO's of companies in the other industries. There are also some variations in the composition of the top-management group reported by CEO's of firms of different sizes.

Moreover, there are variations in the kinds of executives represented in top management that seem to be related to the CEO's idea of the kinds of executives who need to be in top management in order to manage the company in some particular way. Four different top-management models were established that appear to reflect different ways of managing a company. The survey data were then analyzed to see how many of the top-management groups the CEO's had described would fit each model.

All of these models include the CEO, one or more additional general operating officers who focus on the company as a *whole,* and certain corporate *staff* executives—such as the top financial officer. The distinctions among the models are based on what other kinds of *operating* managers—if any—are also included in the top-management group. (See Exhibit 1.)

Functional Managers Model

We called one model a functional managers model, for all companies following this approach include heads of operating functions (such as production or marketing) in their top-management groups. Twenty percent of the companies surveyed have top-management groups that fit this model. This management model would seem to make sense for a CEO who regards the company as being in a single business and whose basic *management* strategy is focused on managing the key functions.

Exhibit 1: Top Management Models

Which Kinds of Executives Are Included?	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*
CEO	Yes	Yes	Yes	Yes
Other General Operating Officer(s) for the *Whole* Company	Yes	Yes	Yes	Yes
Corporate Staff Executive(s), such as Top Financial Executive	Yes	Yes	Yes	Yes
Top Functional Operating Executive(s), such as Top Marketing Executive and/or Top Production Executive	Yes	Yes	No	No
General Operating Manager(s) for Business-Related *Part(s)* of the Company	No	Yes	Yes	No
Percent of companies with this pattern in top-management group	20%	31%	40%	9%

Source: Shaeffer and Janger, 1982, p. 25

Business Managers Model

A second top-management model is characterized by its inclusion of general operating managers who head product divisions, subsidiaries or other profit-centered "business" groups within the company. Functional heads of manufacturing operations or marketing are not part of top management in these companies. Forty percent of the companies have top-management groups that fit this model. This model would seem to make sense for a CEO who thinks of the company as being in several related businesses, and whose management strategy is focused on the management of those key businesses.

Mix of Managers Model

Still another top-management model is a mix of managers model. It includes *both:* (1) *functional* operating executives; and (2) *general* operating managers for certain business-related divisions or groups within the company. Thirty-one percent of the companies use this model. It is the model that would seem to fit the company engaged in several businesses so closely related that they share common production facilities or consolidate their sales efforts. It would also fit a situation in which the CEO seeks to give closer attention to one of the company's businesses than to the other(s).

Asset and Resource Managers Model

The fourth top-management model is an asset and resource managers model in which there are *no* second-level *operating* executives. All of the top-management group is made up of officers with general corporate management roles and staff executives dealing with corporatewide issues and problems—finance, human resources, law, public affairs. Nine percent of the companies have top-management groups that fit this model. It might be used by the CEO of some very large company who regards it as an agglomeration of unrelated businesses and concentrates on the management of financial assets or, possibly, of other scarce resources as well. But it would also seem to fit the needs of a much smaller single-business company in which the CEO and the other general operating officer for the company as a *whole* provide all the functional and business-related operating expertise the company requires—and the only other top-management expertise needed deals with the acquisition and utilization of financial, technological or human resources.

Who Will Be in Top Management in Three to Five Years?

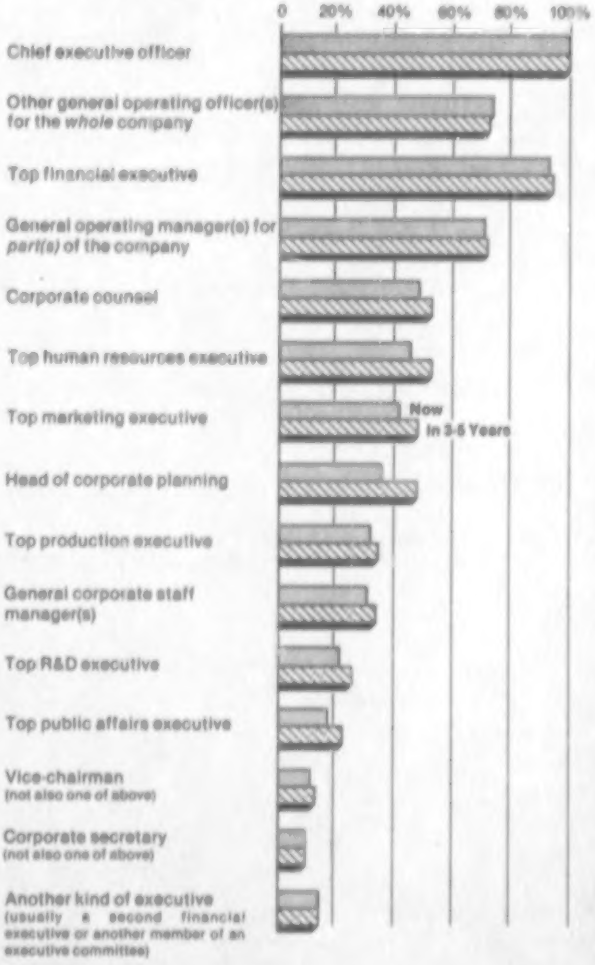
All these variations in the size and composition of top management are relevant in defining top-management staffing needs, but they focus on what already exists, not on what is to come. Therefore, the CEO survey also asked about the future.

Stability—not change—is the watchword when it comes to describing future top-management teams. While there will undoubtedly be some new faces in the top groups, these will largely be replacements for executives with comparable positions. The basic size and mix of responsibilities in the top group is expected to be virtually unchanged. Indeed, as shown in Chart 1, even the "pecking order" based on the proportion of companies including a particular kind of executive in top management does not change in the slightest, and no particular kind of executive suffers any real decline in

Chart 1: The Composition of Top Management Now and in Three to Five Years

(Now Base = 397 companies and Future Base = 369 companies)

Percent of companies in which this kind of executive is included in top management:



Source: Shaeffer and Janger, 1982, p. 32.

representation. At most, an extra executive will sometimes be added; usually this is a corporate planning, marketing or human resources executive. On the whole, though, the CEO's expect the configuration of their top-management groups—and, therefore, their top-management models—to remain remarkably stable. (See Exhibit 2.) (For more detailed information on who is—and will be—in top management by industry, size of company, and top-management model, see Shaeffer and Janger, 1982.)

The General Outlook for the Company Over the Next Three to Five Years

Because it seemed so relevant to any consideration of how top management and top-management's staffing needs might change over the next three to five years, the surveyed CEO's were asked to describe the general outlook for their company during that time period. As noted in the earlier report, and shown again in Table 1, change—not stability—is the basic outlook. The vast majority (92 percent) of the CEO's expect important changes for their company during the next three to five years, and most expect two or three different kinds of changes:

- Half of the CEO's expect an important merger, acquisition or divestiture for their company. This is an especially prevalent view in banks (64 percent) and in medium-large manufacturing companies (59 percent). (There is, of course, no indication as to which firms will do the acquiring and which businesses will be the ones that are gobbled up.)
- Forty percent of the CEO's expect a major improvement in real profitability. More of the CEO's in retailing (57 percent) and in the largest manufacturing firms (49 percent) were this sanguine; fewer CEO's in banks (21 percent), insurance (23 percent), or utilities (32 percent) expect such profit improvement. CEO's of medium-large banks seem especially pessimistic about their profit outlook.
- Just about 40 percent of the CEO's expect much greater diversification of their company's businesses in the next three to five years. This is an especially prevalent view in the largest banks (71 percent) and the largest insurance companies (50 percent) but is seen as much less likely by the CEO's of medium-large insurance firms (18 percent).
- Over one-third of the CEO's expect important change(s) in basic technology for their company in the forecast period. This view is especially prevalent among the CEO's of both the largest (67 percent) and the medium-large banks (50 percent). It is seen as much less likely to happen in retailing (13 percent) and in the large insurance companies (23 percent).

Exhibit 2: Matrix of Top Management Models Now and in Three to Five Years

	Future Top Management Model¹				
Top Management Model Now¹	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*	*Total*
Asset and Resource Managers Model	7	1	1	23	32
Business Managers Model	1	23	119	4	147
Mix of Managers Model	4	106	4	1	115
Functional Managers Model	59	11	2	1	73
Total	71	141	126	29	367 companies

¹The models being used have been inferred from the CEO's description of the top-management groups.

Source: Shaeffer and Janger, 1982, p. 33.

Table 1: The General Outlook for the Company Over the Next Three to Five Years, by Industry and Size of Company

Expected Changes[1]	*Total*	*Manufacturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*
Much greater diversification of the company's business(es)	39%	37%	59%	36%	30%	46%
Much less diversification of the company's businesses	6	8	—	5	9	—
Important merger/acquisition/divestiture(s)	51	54	64	39	44	32
A major reorganization of the whole company	12	11	15	15	17	—
A major increase in operations outside the United States	18	23	5	—	13	9
A major decrease in foreign operations	1	1	—	—	4	—
Important change(s) in basic technology	34	33	59	28	13	27
A major change in overall corporate growth (in real terms)	31	30	26	36	39	32
A major improvement in real profitability	40	45	21	23	57	32
Other important change(s) (specify)	7	6	8	13	9	9
None of the above	8	7	10	13	4	14
Base (number of companies responding)[2]	*415*	*292*	*39*	*39*	*23*	*22*
Average number of mentions	**2.5**	**2.5**	**2.6**	**2.0**	**2.4**	**1.9**

	Manufacturing		*Banks*		*Insurance*	
Expected Changes	*500 Largest*	*Next 500*	*50 Largest*	*50 Medium Large*	*50 Largest*	*50 Medium Large*
Much greater diversification of the company's business(es)	33%	42%	71%	44%	50%	18%
Much less diversification of the company's businesses	7	8	—	—	9	—
Important merger/acquisition/divestiture(s)	49	59	57	72	41	35
A major reorganization of the whole company	11	11	19	11	14	18
A major increase in operations outside the United States	23	22	5	6	—	—
A major decrease in foreign operations	1	1	—	—	—	—
Important change(s) in basic technology	38	28	67	50	23	35
A major change in overall corporate growth (in real terms)	30	29	33	17	41	35
A major improvement in real profitability	49	40	33	6	27	18
Other important change(s) (specify)	5	6	5	11	9	18
None of the above	8	5	10	11	9	18
Base[2]	*158*	*134*	*21*	*18*	*22*	*17*
Average number of mentions	**2.8**	**2.5**	**3.2**	**2.1**	**2.2**	**1.8**

[1] The questionnaire asked: "As CEO, do you foresee important changes of any of the following kinds for the company during the next 3-5 years? (Check as many as apply.)
[2] Percentages add to more than 100 percent because of multiple responses.

Source: Shaeffer and Janger, 1982, Table 6.

- About 30 percent of the CEO's expect a major change in overall corporate growth (in real terms) for their company, but so few CEO's in medium-large banks have this expectation (17 percent) that one can only assume many expect to be acquired.
- Over 10 percent of the CEO's expect a major reorganization of their whole company within the next three to five years. This runs somewhat higher (17 to 19 percent) for the largest banks, the medium-large insurance companies, and in retailing.

The Employment Outlook

The surveyed CEO's were also asked to predict how their company's employment would change over the next three to five years, both within the United States and in other countries.

- Total U.S. employment in the *combined* surveyed companies is expected to grow only 6 percent over the forecast period. The medium-large manufacturing firms expect 23 percent growth in U.S. employment; the retailers 22 percent growth; the largest banks 18 percent growth; and the medium-large banks 13 percent growth. But this is offset by the 5 percent *drop* in U.S. employment that is expected in both the largest insurance companies and the utilities, and by the fact that the largest manufacturing companies expect their U.S. employment to hold steady.
- Employment outside the United States is expected to

grow at a somewhat higher rate than U.S. employment in the manufacturing companies and in the banks surveyed. The medium-large firms in both of these categories expect *substantial* employment growth outside the United States, but they are, of course, starting from a much lower base than their larger counterparts.

In addition to the above changes in employment noted in the earlier report, there are some interesting differences in the employment outlook for firms using different top-management models.[1] Firms using the functional managers model and also those using the mix of managers model expect *both* their U.S. and their foreign employment to increase. Those using the business managers model expect their U.S. employment to increase, but their foreign employment is expected to show a modest decrease. Those using an asset and resource managers model expect *both* their U.S. and their foreign employment to *decrease* during the next three to five years, with the combined future employment figure being only 84 percent of the present figure.

The number of companies involved is relatively small (34), but the difference in the employment figures is statistically significant and intriguing. Are companies that use the asset and resource managers model of top management more likely to think of their business operations as a portfolio of investments, some of which might be quickly sold off if the outlook for a particular business is poor?

Another possible explanation, of course, would be that these companies tend to be in "old-line" businesses and that the worldwide business recession has hit their operations especially hard. While this might be due to some inherent weakness of management (as some management theorists would claim), it might also be a cyclical phenomenon related to the different industry mix or geographic dispersion of their businesses.

Key Staffing Challenges Relating to the Top-Management Group

Against this background—*stability* for the top-management group and several major *changes* in the outlook for the company as a whole—what do the CEO's say are the key staffing challenges they foresee relating to the top-management group? When given a "laundry list" of possible challenges (plus the opportunity to add some others), the CEO's in various industries selected those shown in Table 2. (See Appendix Table 1 for those chosen by CEO's of companies of different sizes.)

The CEO's were also asked to rank the five challenges that seemed most important to the success of their particular company. When all their rankings are combined in weighted form, these are the five key challenges the CEO's choose:

(1) "Developing a strategic business-planning perspective within the top-management group."

(2) "Building top management's effectiveness in managing a wider range of businesses."

(3) "Choosing the next chief executive officer." (Only about half of the companies will face this challenge in the next three to five years. Those that do, rank it second in importance.)

(4) "Providing more opportunities for potential top executives to develop *general* management perspectives and skills."

(5) "Building teamwork at the top-management level."

Special Challenges by Industry

There is remarkable consistency in the general pattern of the five key challenges across industries and in companies of different sizes, but there are also some important variations:

- *Utilities* are the only industry category in which developing a strategic business-planning perspective is the second, not the first, challenge. Their number-one concern is: "Building top-management's effectiveness in dealing with governments and other external forces and groups"; and their number-three concern is: "Improving top management's grasp of emerging political, economic and social issues."

Given the regulated monopoly status of gas and electric utilities, this double emphasis makes sense. But these two concerns are obviously related; so for purposes of analysis, the responses to them were combined on a nonduplicative basis in other industries. The combined category, which might be described as: "Coping with the external environment in which business operates," turns out to be among the five key challenges for insurance companies, for medium-large banks, and for the 500 largest manufacturers as well.

Moreover, comments by a number of CEO's indicate that the external environments their companies must learn to cope with are expanding rapidly. Where once they were considered to be local, state, regional or at most national in scope, they are increasingly becoming multinational, or even truly global.

- *Banks* identify another special challenge, and it is one that underscores the changing boundaries of business operations both geographically and by industry categories. Tied for third place on their list is: "Improving top management's grasp of emerging technological issues."

Moreover, while not included among the top five challenges by most of them, 57 percent of the CEO's of

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[1] Shaeffer and Janger, 1982.

Table 2: Key Challenges Relating to the Top-Management Group, by Industry

Key Challenges[1]	*Total*	*Manufacturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*
Developing a strategic business-planning perspective within the top-management group	85%	84%	95%	93%	85%	79%
Providing more opportunities for potential top executives to develop general-management perspectives and skills	75	72	80	81	82	75
Building top-management effectiveness in managing a wider range of businesses	64	64	65	64	59	58
Building teamwork at the top-management level	57	53	65	62	78	62
Providing more opportunities for potential top executives to innovate and show entrepreneurial flair	56	54	50	64	63	62
Linking top-management succession and development planning to strategic business planning	54	53	48	55	60	62
Choosing the next chief executive officer	52	51	45	55	59	62
Building top-management effectiveness in dealing with governments and other external forces and groups	52	48	60	67	41	83
Improving top management's grasp of emerging political, economic and social issues	49	42	65	62	63	75
Improving top management's grasp of emerging technological issues	46	49	65	26	22	38
Formalizing top-management succession and development planning	36	34	42	43	33	33
Including more women and minorities in the top-management group	35	29	52	60	30	38
Developing a world business outlook within the top-management group	29	36	38	5	7	4
Replacing several top-management executives at about the same time	29	31	15	33	15	29
Bringing more outsiders into the top-management group	8	10	8	7	—	—
Improving top executive health, fitness, work habits	8	8	5	7	7	12
Including more foreign nationals in the top-management group	3	4	2	—	—	—
Other	7	7	2	14	7	4
Base	(424)	(296)	(40)	(42)	(23)	(23)

[1] The questionnaire asked: "When it comes to the top-management group, different companies may be facing quite different kinds of challenges. As CEO, what are the key challenges you believe your company will face during the next three to five years? (Check all that apply.)"

the *largest banks* consider: "Developing a world business outlook within the top-management group" to be one of the key challenges over the next three to five years.

- *Retailers* also identify an especially strong need. Fourth on their list of challenges is: "Providing more opportunities for potential top executives to innovate and show entrepreneurial flair."

Indeed, regardless of industry, more than half of all the CEO's responding to the survey had chosen this as a key challenge, even if it is not among their top five. It is noted most frequently by CEO's in insurance companies and utilities, in addition to those in retailing.

Special Challenges Related to Top-Management Models

There is also some variation in the emphasis that CEO's who use the different models of top management give to different challenges when they rank the five most important ones. The most intriguing difference is an omission. Companies using the asset and resource managers model of top management show no great concern for: "Building top management's effectiveness in managing a wider range of businesses." These companies may already be operating such a wide range of diverse businesses that they do not expect to diversify any further. As to how to manage such diversity effectively, it is interesting to note that these same companies give special emphasis to "choosing the next CEO" and to "providing more opportunities for potential top executives to innovate and show entrepreneurial flair." Their basic management strategy may well be a "hands off" approach once resources have been allocated.

The selection of the next CEO also looms very large in companies using the business managers model. Many of these top-management groups do not include a chief operating officer, so there is no one who is clearly second in command in these companies. It is also interesting to note that companies using this top-management model show comparatively little interest in "building teamwork at the top-management level." All this may explain why the CEO's of this group of companies give fifth emphasis to: "Linking top-management succession and development planning to strategic business planning." (See Appendix Tables 2 to 4 for detailed information on the key challenges CEO's identified and ranked most important by industry, size of company, and top-management model.)

Choosing the Next CEO

The shift from one CEO to the next is always an important challenge. In unsettled times, it often marks a turning point for the organization—a shift in basic corporate strategy, corporate structure, and/or management style. About half of the firms surveyed will face this challenge during the next three to five years. (See Appendix Table 5.) Regardless of when the change comes—the median year is 1986—most of the CEO's expect it will be handled in a preplanned, orderly fashion. There are no significant differences reported in the way CEO's will be chosen in the next year or so compared to the way they will be chosen in the more distant future. Furthermore, the characteristics needed by the next CEO's remain much the same regardless of when they will be appointed.

The current CEO generally expects to select his own successor in consultation with the board of directors, with relatively little involvement by others, whether they be the company's executives or influential outsiders. While they may turn out to be wrong, about two-thirds of the present CEO's expect that their own opinions will be most likely to determine who the next CEO will be. (See Appendix Tables 6 and 7.) The insurance industry is the only one in which less than half of the CEO's expect to select their own successor; there this power is sometimes held by individual stockholders (18 percent)—or, of course, by the board of directors.

A sizable number of the CEO's appear to be leaving their options open among several *internal* candidates (33 percent of all the CEO's, for example, are unwilling to predict how much length of service with the company the next CEO will have), but relatively few give any indication that an "earthquake" is being planned in which some stranger to the company will suddenly be brought in from the outside. On an overall basis, only 8 percent plan to consult with executive recruiters or management consultants when choosing the next CEO. (This figure does go up to 15 percent in banking and 12 percent in insurance.) Instead, the typical responses of the CEO's indicate they expect their successor:

- Will be about 50 years old when named to the job—a little older in the largest companies. (See Appendix Table 8.)
- Is very likely to be holding a general management position with the company at that time—COO or general operating manager in charge of some business-related *part* of the company. (See Appendix Tables 9 and 10.)
- Is likely to have about 20 years of service with this company—a little less in banking and insurance; a little more for those using an asset and resource managers model for the top group. (See Appendix Tables 11 and 12.)
- Is not very likely to have service with an acquired or merged firm. However, a substantial number (25 percent) of the CEO's admit they do not know about this. (See Appendix Table 13.) Even those who do expect the successor to have this kind of outside service seem to be contemplating that it will be followed by substantial service with their own company.

Prior to becoming a general manager, the next CEO is almost certain to have had functional experience and/or specialized education in one or more of these three areas: marketing and sales; production and engineering; finance and accounting. Indeed, as Table 3 shows, in 53 percent of the companies the next CEO is likely to have experience or education in two or more of these key functions. The particular mix of key functions varies appropriately by industry: Marketing and sales is mentioned more frequently in retailing (67 percent), insurance (52 percent), and manufacturing (45 percent). Production and engineering is mentioned more frequently in utilities (46 percent) and manufacturing (35 percent). A finance and accounting background receives most mention in banks (58 percent), but is also noted by many companies in the other industries, where from 21 percent to 38 percent mention it.

A substantial proportion of the firms in all industries also indicate that the next CEO will have been through a series of rotating cross-functional assignments (from 26 to 45 percent say this), and it is plain that the rotation will occur primarily among the two main *operating* functions plus the financial function. There is also some write-in mention of international experience and of industry-specific functions like R&D in manufacturing and lending in banking. But, except for finance, the typical

Table 3: Functional Experience or Education of Next CEO, by Industry

Functional Area	*Total*	*Manufacturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*
Marketing and sales	43%	45%	18%	52%	67%	8%
Production and engineering	27	35	2	5	—	46
Finance and accounting	27	21	58	38	37	33
Industrial relations and human resources	3	3	2	—	4	8
Law	3	2	—	5	4	8
Public affairs and public relations	a	1	—	—	4	4
Other	7	8	8	5	4	4
Rotating cross-functional assignments	31	30	45	33	26	38
Base[1]	(423)	(297)	(40)	(42)	(27)	(24)
Companies mentioning only one functional area	47%					
Companies mentioning two or more areas (includes all mentioning rotating assignments)	53%					
Base	(423)					
Different from present CEO's background?						
Yes	36%	40%	23%	26%	35%	26%
No	64	60	77	74	65	74
Base	(395)	(278)	(39)	(39)	(23)	(23)

[1] Percentages add to more than 100% because of multiple responses.

[a] Less than 5%.

corporate *staff* functions—human resources, law, public affairs—receive very scant mention.

A heavy majority of the current CEO's in all industries indicate that the functional backgrounds of their successors will not differ significantly from their own background or specialized education.[3] The proportion ranges from 77 percent in banking to 60 percent in manufacturing. Given the data above, even those who say there will be some difference still seem to be talking about a difference that would fit within the norms for their industry. Thus, while 40 percent of the CEO's in manufacturing expect their successors' backgrounds to differ from their own, it is plain that the new CEO's background is likely to remain somewhere within a combination or permutation of the three traditional "bread-and-butter" functions in manufacturing—production, marketing and finance. Even though there is evidence that the CEO's job is becoming more externally oriented and more focused on planning for the future, there does not seem to be any evidence that a corporate *staff* background in human resources, law or public affairs is especially valued when selecting CEO's.[4]

Special Characteristics Needed by the Next CEO

Certain skills, knowledge and personality attributes are always required for effective performance as the CEO of a major U.S. company, but changing circumstances sometimes lead to changing needs. The CEO's responding to the survey were asked whether they believed certain characteristics should receive *special emphasis* when choosing the company's next CEO, and, if so, which three items on a suggested list of characteristics they would rank as first, second and third in importance. (Other characteristics could be added to the list.) Over three-quarters of the CEO's in all categories affirmed that some characteristics will have to be given special emphasis in choosing the next CEO. Table 4 shows the weighted score for each of the characteristics on the list.

Most CEO's not only believe their company can "grow its own" next leader, but also seem to believe there are a reasonable number of basically well-qualified candidates available within the company. When they rank the three characteristics that should receive special emphasis when choosing their successors, they do not highlight the basic knowledge and experience needed to handle the assignment. Instead, they rank highly individual *personality* characteristics as number one and number two in importance and only then go on to mention some basic background characteristics. The characteristics they ranked as needing the greatest emphasis are:

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[3] For further information on the characteristics of chief executives over the years, see Harold Stieglitz, *The Chief Executive and His Job*, National Industrial Conference Board Report SPP 214, 1969; Patricia Bonfield, *U.S. Business Leaders: A Study of Opinions and Characteristics*, Conference Board Report No. 786, 1980. Also see, Mabel Newcomer, *The Big Business Executive: The Factors That Made Him, 1900-1950*, New York: Columbia University Press, 1955; Charles C. Burck, "A Group Profile of the *Fortune* 500 Chief Executives," *Fortune*, May, 1976; and *The Chief Executive Background and Attitude Profiles*, Arthur Young Executive Resource Consultants, New York, 1980.

[4] Newcomer, 1955; Stieglitz, 1969; and Bonfield, 1980.

1. Personal leadership style,
2. Aggressive, competitive outlook,

*3.5. Knowledge of how this business (industry) operates

*3.5. Experience as a general manager.

*Tied for third place.

Fairly close runners up are entrepreneurial flair; knowledge of how this *company* operates (as distinct from this business or industry); and strategic-planning experience. This pattern generally holds true regardless of industry, size of company, or top-management model but there are some appropriate differences. (See Appendix Tables 14 and 15.)

Table 4: Three Characteristics Needing Special Emphasis When Choosing the Next CEO

Characteristics	*Weighted Score Based on CEO's Rankings of Importance*[1]
Personal leadership style	1.58
Aggressive, competitive outlook	.78
Knowledge of how this business (industry) operates	.56
Experience as a general manager	.55
Entrepreneurial flair	.51
Knowledge of how this company operates	.47
Strategic planning experience	.44
Financial skills	.18
Experience dealing with governments and other external forces and groups	.11
Knowledge of management science and systems	.11
Business experience in:	
More than one function	.08
More than one industry	.08
Acquisition or divestiture experience	.07
Negotiating skills	.05
Business experience in:	
More than one company	.02
More than one country	.02
Academic training in business	.01
Other	.09
Number of companies providing rankings	(326)

[1] If *every* CEO had ranked a characteristic as number one in importance, its weighted score would be 3.00

Planning for Management Succession and Development

Two items on the "laundry list" of challenges relating to staffing the top-management group dealt with planning for management succession and development:

"Linking top-management succession and development planning with strategic business planning"; and

"Formalizing top-management succession and development planning."

Neither one by itself appeared on the lists of the top five challenges for any industry category and the first one just barely made it into fifth position for the medium-large banks and for the asset and resource managers model. The two challenges are obviously related so, once again, the responses to them were combined on a non-duplicative basis for purposes of analysis. The combined category which might be described as: "Doing something to improve our management succession and development planning," then turns out to be among the top five challenges for all the banks, the retailing firms and the largest insurance companies.

Other survey information had also been gathered about the companies' current management succession and development planning. These questions were designed to provide an overview of the general nature of the planning, and also to obtain the CEO's evaluations of effectiveness without getting into the details of how the planning processes operate. While CEO's stress the important contribution this kind of planning makes in ensuring top-management effectiveness and continuity, it is plain that they still see room for considerable improvement. This ties in with the fact that so many do regard this as a challenging area.

All CEO's, of course, do some kind of planning for management succession and development, but some chief executives have felt the need for a *formal* planning program. This does not necessarily mean that they use printed forms, written procedures or records, or a computer-based information system. Instead—at least in the opinion of two groups of key executives who wrestled with the idea—having a *formal* planning program simply means that some uniform procedure or approach has been thought through and is being followed with reasonable consistency on an appropriately scheduled basis, regardless of whether all those who are involved are aware that this is so.[5]

Just about half of the CEO's report that their companies have a formal management succession and development planning program. Major technological change, the growth of the company, and its increasing organizational complexity all seem to be driving forces encouraging formalization of planning. Such programs are most common in utilities (62 percent), in manufacturing (52 percent), and in banking (52 percent). Thus far, they are conspicuous by their absence in insurance (24 percent), and not too prevalent in retailing (44 percent). However, this may well change (see Table 2).

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[5] This definition was developed during research seminars attended by CEO's and other designated senior executives from companies that had participated in the CEO survey.

Not surprisingly, formal planning is much more likely to be found in the largest companies. Sixty-six percent of the 500 largest manufacturers do formal planning compared to 35 percent of the next 500 firms. Seventy-two percent of the largest banks have formal plans, while only 35 percent of the medium-large banks do. Even in the insurance industry, if such planning occurs at all, it is a large-company phenomenon.

There is also reason to believe that formal planning becomes more common as the economic configuration of the firm becomes more complex. Only 41 percent of the companies using the functional managers model for top management (firms most likely to be single-business companies) do formal succession planning, while 54 percent of those using the business managers model and 59 percent of those using the asset and resource managers model—both likely to be firms engaged in several businesses—do so.

Of the companies that have formal planning programs, 58 percent say their programs are formally linked to their business planning. This is especially likely to be true in the largest manufacturing companies (61 percent). Once again there seems to be a relationship to the top-management model (or to the complexity of the economic configuration of the firm). Only 53 percent of the companies using the functional managers model of top management report a formal linkage to business planning, while 58 percent of those using the business managers model and 68 percent of those using the asset and resource managers model report such a linkage.

Typically there are somewhere between 20 and 30 executives mentioned by name in the *corporate level* succession plan. But as shown in Appendix Table 16, there is some variation in the median figures by industry and size of company. In utilities, the median number is 40; in banks and manaufacturing it is 25; but in the largest manufacturing companies it is 30 compared to 20 in the medium-large firms.

There is also another pattern: Often only three to ten executives are named in the plan. This is the pattern in 39 percent of the bank plans. In manufacturing, size of company makes a major difference. Only 19 percent of the plans of the 500 largest manufacturing firms name so few as three to ten executives, but 42 percent of the plans of the next 500 firms do.

On a company-by-company basis, the size of the top-management group is one of the primary factors that is likely to influence the number of executives named in the corporate-level succession plan. Similarly, whether a change of CEO is covered by a formal succession plan may well influence the number of executives named in the plan; this is the case in 45 percent of the companies.

When both the size of the top-management group and the inclusion or exclusion of the CEO's position from formal planning are taken into account on a company-by-company basis, there still is a bimodel distribution showing two very different patterns in the ratio of the number of executives named in the succession plan to the number of top-management positions covered by succession planning:

Ratio	*Percent of companies*
1.5 or less	35
1.6-2.5	16
2.6-3.5	8
3.6-5.5	17
5.6 or larger	24

The smaller ratios may best be interpreted as the number of back-ups planned for each top-management executive. According to the executives who attended the participative research seminars, the larger ratios indicate: (1) the CEO takes a direct interest in the succession or replacement planning being done for a number of key executives who are not included in top management; and/or (2) the CEO takes a direct interest in the progress of certain pools of individuals, who are being developed as *potential* key executives.

In any event, it is plain that the formal succession and development planning that is being done at the *corporate level* does not exist in a vacuum. Regardless of industry or size of company, about 90 percent of the CEO's report that similar formal succession and development planning is done at lower organization levels. Moreover, 45 percent of all the CEO's indicate that a committee of the board of directors regularly concerns itself with the selection and development of top-management executives *other than the CEO*. This is especially likely to be true in banking (60 percent) and in retailing (54 percent). It is also more likely to be the case in the largest companies. In manufacturing, 50 percent of the top 500 companies report a committee of the board is involved, but this is true in only 36 percent of the medium-large firms. In banking, the figures are 67 percent for the largest banks and 53 percent for the medium-large ones. In insurance, the percentages are closer: 44 percent in the largest firms and 42 percent in the medium-large ones.

The Results of Formal Succession and Development Planning

The CEO's of companies having formal succession and development plans were asked how often they review the basic nature and effectiveness of their whole program, and they were also asked a series of questions about how well the program is working. Over half of the CEO's (57 percent) say they review their program annually, and almost all the others say they review it even more frequently (19 percent semi-annually; 11 percent quarterly; 10 percent continuously). Several of those who review their program continuously indicate that the planning is done at different times throughout the year for different parts of the organization, and that such a process leads to virtually continuous evaluation and reevaluation of the whole program's effectiveness.

Many of the formal planning programs appear to be quite new. A fifth of the CEO's were unwilling to make an overall evaluation of program effectiveness at this time; several specifically commented it was too early to make an informed judgment. Of the 164 CEO's who did assess the overall usefulness of their programs in terms of ensuring top-management continuity and effectiveness, four out of five gave a positive evaluation:

CEO's evaluation	*Percent of companies*
Essential	35%
Generally useful	44
A mixed bag	16
Negative	4

There are some differences in evaluations by size of company; 45 percent of the largest manufacturing firms indicate their planning is essential while only 15 percent of the medium-large firms say this. The latter firms are much more likely (32 percent) to characterize their planning results as a mixed bag. (See Appendix Table 17.)

Regardless of industry or size of company, there is fairly general agreement (67 to 74 percent) that the formal succession and development planning program will become more useful during the next few years. Indeed, several CEO's comment that it tends to be a self-sharpening tool, and that additional experience with the process is likely to improve the results being achieved. Others indicate they expect improvement because they will be giving the planning program greater emphasis.

As still another check on the overall usefulness of formal planning, the CEO's were asked a question calling for hard data: "When the last top management position, other than CEO, was filled, was the formal plan followed?" Forty-eight percent of the CEO's said yes; 23 percent said partly; and 29 percent said no.

An even larger proportion of the CEO's of the largest manufacturing companies said yes (56 percent). They had also been more likely to say that formal planning was essential to ensuring top-management continuity and effectiveness and to indicate that their planning was formally linked to their strategic business planning. But what is best for the very largest companies is not necessarily feasible and appropriate for medium-large firms (46 percent of the medium-large manufacturing companies said their plans were *not* followed).

The Kinds of Executives Being Developed Effectively

The results of succession and development planning are very uneven for different kinds of executives. When the CEO's were asked what kinds of executives their formal planning programs develop effectively, 94 percent said the programs did a good job of developing general managers; 66 percent said functional specialists; only 31 percent said business strategists; and only 13 percent said entrepreneurs.

It is, therefore, plain that the number-one challenge almost all the CEO's identified for their top group—the development of a strategic business-planning perspective—represents a crucial, unmet top-level staffing need. It is also plain that the development of entrepreneurs warrants further consideration, although there are some management theorists who claim this goes beyond what a large corporation can hope to accomplish.

The failure of most of the current plans to yield these two distinct kinds of management generalists suggests that most companies have not yet differentiated the selection and development processes that are required to produce them. They may still be assuming that a really good general manager can manage any kind of business equally effectively, and can also do an equally good job at any stage in a business's life cycle.

Further evidence that many companies may not be differentiating their top-management staffing processes sufficiently is found in the fact that one-third of the CEO's are not satisfied with the effectiveness of their plans in developing *functional specialists.* Every single one of the top-management models includes some functional executives. All include some corporate *staff* executives who are *functional* managers—for example, the top financial executive. Indeed, two of the models also include *operating* executives who are functional managers—the top production executive and/or the top marketing executive. Yet the CEO's of companies using these two top-management models indicate no greater effectiveness in the development of functional specialists. (See Appendix Table 18.)

It is, of course, possible that many CEO's regard functional specialization as undesirable—that they think any really *good manager* can manage *any function* of a business equally effectively. Indeed, they may feel that cross-functional experience is the best of all possible ways to develop *all* of the members of a top-management team.

Are they saying, in essence, that the only good

Helping Corporate Staff Executives to Help the Company

The preliminary findings of this study have been discussed at several meetings. Many personnel executives and other corporate staff executives who attended these meetings have indicated it would be especially helpful if their own CEO's would provide them with the kind of information this survey covered. Some say the questions are so relevant to developing top-level managerial effectiveness that they plan to ask their CEO's for the information if it is not volunteered. Others, with less derring-do, expect to use the detailed survey results by industry, size of firm, and top-management model for guidance.

manager is a *general* manager? Has the emphasis on *general* management skills and on a *well-rounded* functional background become so strong that in many of these companies pursuing such a career path is seen as "the only way to get ahead in this outfit"? How many of these companies are forcing some of their best functional specialists to become second-rate management generalists in order to be properly rewarded throughout their careers? (And is this, by any chance, part of the reason U.S. companies have a productivity problem?)

Indeed, how many of today's management-succession and development planning programs have the development of as many potential *chief executives* (and chief operating officers) as possible as their primary focus? Such a "chairman of the board" syndrome may once have been urgently appropriate. But nowadays, top management is more often thought of as a *team* effort, and different players on the team need to be good at doing different things. Therefore, the syndrome may interfere with the effective development of all the differentiated kinds of top-level executives CEO's are now finding their companies need.

Appendix

Appendix Table 1: Key Challenges Relating to the Top-Management Group, by Size of Company

	Manufacturing		*Banks*		*Insurance*	
Key Challenges	*500 Largest*	*Next 500*	*50 Largest*	*50 Medium Large*	*50 Largest*	*50 Medium Large*
Developing a strategic business-planning perspective within the top-management group	84%	83%	95%	95%	96%	90%
Providing more opportunities for potential top executives to develop general-management perspectives and skills	68	76	81	79	78	84
Building top-management effectiveness in managing a wider range of businesses	58	72	71	58	65	63
Building teamwork at the top-management level	51	55	71	58	52	74
Providing more opportunities for potential top executives to innovate and show entrepreneurial flair	52	57	48	53	65	63
Linking top-management succession and development planning to strategic business planning	51	54	43	53	52	58
Choosing the next chief executive officer	57	44	38	53	57	53
Building top-management effectiveness in dealing with governments and other external forces and groups	56	39	62	58	83	47
Improving top management's grasp of emerging political, economic and social issues	53	29	71	58	74	47
Improving top management's grasp of emerging technological issues	51	46	76	53	30	21
Formalizing top-management succession and development planning	30	40	33	53	52	32
Including more women and minorities in the top-management group	39	17	52	53	65	53
Developing a world business outlook within the top-management group	36	35	57	16	9	—
Replacing several top-management executives at about the same time	39	23	19	10	44	21
Bringing more outsiders into the top-management group	6	15	10	5	13	—
Improving top-executive health, fitness, work habits	8	9	10	—	4	11
Including more foreign nationals in the top-management group	7	1	5	—	—	—
Other	4	10	5	—	22	5
Base	(160)	(136)	(21)	(19)	(23)	(19)

Appendix Table 2: The Five Most Important Challenges, by Industry

Most Important Challenges[1]	*Total*	*Manufacturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*
Developing a strategic business-planning perspective within the top-management group	1	1	1	1	1	2
Building top-management effectiveness in managing a wider range of businesses	2	2	2	2	—	4
Choosing the next chief executive officer[2]	3	3	5	4	5	—
Providing more opportunities for potential top executives to develop general-management perspectives and skills	4	4	—	3	3	—
Building teamwork at the top-management level	5	5	3.5[a]	5	2	5
Building top-management effectiveness in dealing with governments and other external forces and groups	—	—	—	—	—	1
Improving top management's grasp of emerging political, economic and social issues	—	—	—	—	—	3
Improving top management's grasp of emerging technological issues	—	—	3.5[a]	—	—	—
Providing more opportunities for potential top executives to innovate and show entrepreneurial flair	—	—	—	—	4	—
Number of companies providing rankings	(424)	(296)	(40)	(42)	(23)	(23)

[a] Tied.

[1] The question on which this table is based was: "Of these (key challenges), which *five* seem most important to the success of the company?" (Ranked 1 through 5).

[2] Only 52 percent of all companies say they expect to face this challenge in the next three to five years. Those that do, rank its importance as 2 (Total, Manufacturing, Banks); 3 (Insurance); 5 (Retailing) or still not in the top 5 (Utilities).

Appendix Table 3: The Five Most Important Challenges, by Size of Company

	Manufacturing		*Banks*		*Insurance*	
Most Important Challenges	*500 Largest*	*Next 500*	*50 Largest*	*50 Medium Large*	*50 Largest*	*50 Medium Large*
Developing a strategic business-planning perspective within the top-management group	1	1	1	1	1	1
Building top-management effectiveness in managing a wider range of businesses	3	2	4	2	2	3
Choosing the next chief executive officer[1]	2	5	5	4[a]	4.5[a]	5
Providing more opportunities for potential top executives to develop general-management perspectives and skills	4	3	—	4[a]	—	2
Building teamwork at the top-management level	5	4	3	—	—	4
Building top-management effectiveness in dealing with governments and other external forces and groups	—	—	—	—	3	—
Improving top management's grasp of emerging technological issues	—	—	2	—	—	—
Improving top management's grasp of emerging political, economic and social issues	—	—	—	—	4.5[a]	—
Linking top-management succession and development planning to strategic business planning	—	—	—	4[a]	—	—
Number of companies providing rankings	(160)	(136)	(21)	(19)	(23)	(19)

[a] Tied.

[1] Those that say they face this challenge in the next three to five years rank its importance as 2 (500 Largest Manufacturing; 50 Largest Banks; Next 500 Manufacturing); or as 3 (50 Largest Insurance; 50 Medium Large Insurance).

Appendix Table 4: The Five Most Important Challenges, by Top-Management Model

Most Important Challenges	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*
Developing a strategic business-planning perspective within the top-management group	1	1	1	1
Building top-management effectiveness in managing a wider range of businesses	2	2	3	—
Providing more opportunities for potential top executives to develop general-management perspectives and skills	3	3	4	3[a]
Building teamwork at the top-management level	4	4	—	5
Choosing the next chief executive officer	5	5	2	3[a]
Linking top-management succession and development planning to strategic planning	—	—	5	—
Providing more opportunities for potential top executives to innovate and show entrepreneurial flair	—	—	—	3[a]
Base	(80)	(109)	(143)	(32)

[a] Tied.

Appendix Table 5: When Next CEO Is Likely to be Named, by Industry

Year	*Total*	*Manufacturing*[1]	*Banks*[1]	*Insurance*	*Retailing*[1]	*Utilities*[1]
1981 or 1982	14%	14%	12%	22%	9%	17%
1983 or 1984	21	20	12	18	36	25
1985 or 1986	28	27	20	28	42	29
1987 or 1988	13	12	24	12	4	12
1989 or 1990	13	13	24	8	4	12
1991—1995	9	10	6	12	4	4
1996 or later	2	3	3	—	—	—
Base	(389)	(276)	(34)	(42)	(22)	(24)
Median year	**1986**	**1986**	**1987**	**1985**	**1986**	**1985**

[1] Percentages do not add to 100 percent due to rounding.

Appendix Table 6: Who Will Be Consulted in Choosing the Next CEO, by Industry and Size of Company

							Manufacturing		*Banks*		*Insurance*	
Persons Consulted	*Total*	*Manu-facturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*	*500 Largest*	*Next 500*	*50 Largest*	*50 Medium Large*	*50 Largest*	*50 Medium Large*
Present CEO	98%	98%	100%	98%	96%	96%	99%	97%	100%	100%	96%	100%
Committee of the board	62	57	90	67	70	67	60	53	90	90	74	58
Full board of directors	59	60	40	64	63	58	58	62	38	42	78	47
Outside directors	56	57	52	36	59	63	66	47	52	53	39	32
Chairman of the board (not also CEO)	22	24	12	29	7	4	19	36	10	16	13	47
Major individual stockholders	19	17	15	33	37	—	14	19	24	5	26	42
Top human-resources executive	19	22	20	9	22	8	26	17	33	5	9	10
Outside executive recruiters or management consultants	8	7	15	12	4	4	2	10	24	5	4	21
Full top-management group	7	6	12	7	7	4	4	7	10	16	9	5
Committee of executives	5	4	5	5	7	8	5	5	10	—	4	5
Head of management-succession planning unit	2	2	5	—	4	4	4	—	—	10	—	—
Outside commercial or investment bankers	2	2	—	—	7	—	2	2	—	—	13	—
Other	3	2	2	10	—	12	1	3	5	—	—	5
Base	(422)	(296)	(40)	(42)	(27)	(24)	(160)	(136)	(21)	(19)	(23)	(19)

Appendix Table 7: Whose Opinion Will Determine the Next CEO, by Industry

Person(s) Deciding	*Total*	*Manufacturing*	*Banks*[1]	*Insurance*[1]	*Retailing*[1]	*Utilities*[1]
Present CEO	66%	68%	62%	41%	74%	77%
Committee of the board	13	10	24	10	22	9
Full board of directors	8	8	3	15	—	5
Outside directors	5	6	5	—	—	5
Major individual stockholder(s)	4	2	5	18	4	—
Chairman of the board (not also CEO)	2	2	—	5	—	—
Other	2	4	—	10	—	5
Base	(389)	(275)	(37)	(39)	(23)	(22)

[1] Percentages do not add to 100 percent due to rounding.

Appendix Table 8: Age of Next CEO when Named, by Industry and Size of Company

							Manufacturing[1]		*Banks*		*Insurance*	
Age	*Total*	*Manu-facturing*	*Banks*[1]	*Insurance*[1]	*Retailing*[1]	*Utilities*	*500 Largest*	*Next 500*	*50 Largest*	*50 Medium Large*	*50 Largest*	*50 Medium Large*
40 or younger	2%	2%	—	3%	6%	—	—	4%	—	—	—	6%
41 to 45	18	16	16%	24	24	17%	10%	24	—	31%	12%	35
46 to 50	35	33	52	42	29	22	31	38	60%	44	38	47
51 to 55	28	30	25	21	30	22	35	24	33	19	38	6
56 to 60	16	18	6	9	6	39	24	10	7	6	12	6
61 or older	1	1	—	—	6	—	1	1	—	—	—	—
Base	(313)	(216)	(31)	(33)	(17)	(18)	(118)	(98)	(15)	(16)	(16)	(17)
Median age	50	50	50	50	50	53	52	50	50	49	50	48
Don't know[2]	23%	23%	22%	19%	32%	22%	22%	27%	25%	16%	27%	10%
Base	(414)	(286)	(39)	(41)	(25)	(23)	(151)	(135)	(20)	(19)	(22)	(19)

[1] Percentages do not add to 100 percent due to rounding.

[2] The percentage responding "Don't know" is based on all those giving some response to the question.

Appendix Table 9: Position Immediately Prior to Becoming Next CEO, by Industry and Size of Company

							Manufacturing[1]		*Banks*		*Insurance*	
Position Held	*Total*	*Manu-facturing*[1]	*Banks*[1]	*Insurance*[1]	*Retailing*	*Utilities*[1]	*500 Largest*	*Next 500*	*50 Largest*[1]	*50 Medium Large*	*50 Largest*	*50 Medium Large*[1]
Chief operating officer	58%	58%	55%	46%	56%	65%	62%	53%	52%	58%	54%	37%
General operating manager in charge of a group of businesses or a division or subsidiary	20	21	25	17	11	9	19	23	24	26	27	5
Top financial executive	4	3	12	7	4	4	2	4	10	16	—	16
Top marketing executive	2	2	—	15	—	—	—	4	—	—	5	26
CEO of another company	2	3	—	—	—	—	3	4	—	—	—	—
General corporate staff manager in charge of several corporate staff units	1	3	2	2	—	4	1	1	5	—	—	5
A multiple response that included CEO of another company	5	5	2	2	7	4	4	7	5	—	5	—
A multiple response that did not include CEO	8	7	2	10	22	13	9	5	5	—	9	10
Base	(421)	(297)	(40)	(41)	(27)	(23)	(160)	(137)	(21)	(19)	(22)	(19)

[1] Percentages do not add to 100 percent due to rounding.

Appendix Table 10: Position Immediately Prior to Becoming Next CEO, by Top-Management Model

Position Held	*Functional Managers Model*[1]	*Mix of Managers Model*[1]	*Business Managers Model*	*Asset and Resource Managers Model*[1]
Chief operating officer	68%	53%	57%	68%
General operating manager in charge of a group of businesses, or a division or subsidiary	6[a]	27	23	12
Top financial executive	8	2	4	6
Top marketing executive	4	4	1[a]	3[a]
CEO of another company	1	2	3	3
General corporate staff manager in charge of several corporate staff units	—	4	—	—
A multiple response that included CEO of another company	8	3	4	—
A multiple response that did not include CEO	5	6	8	9
Base	(80)	(123)	(160)	(34)

[a] This would indicate some reorganization of the top-management group if this position is with the present company.

[1] Percentages do not add to 100 percent due to rounding.

Appendix Table 11: The Next CEO's Years of Service with the Company, by Industry and Size of Company

							Manufacturing		Banks		Insurance	
Years of Service	Total	Manu-facturing	Banks[2]	Insurance[2]	Retailing	Utilities[2]	500 Largest	Next 500	50 Largest	50 Medium Large	50 Largest	50 Medium Large
1 year or less	1%	—	4%	—	5%	—	—	—	(1)	—	—	—
2 to 5 years	8	10%	7	4%	—	5%	7%	13%	(2)	—	—	(1)
6 to 10 years	15	16	7	22	11	17	16	16	(1)	(1)	(1)	(5)
11 to 15 years	20	19	28	14	26	11	14	26	(3)	(5)	(4)	—
16 to 20 years	22	20	21	29	21	28	16	26	(2)	(4)	(3)	(5)
21 to 25 years	18	17	25	14	16	28	24	7	(3)	(4)	(3)	(1)
26 to 30 years	11	13	7	4	16	5	15	9	(2)	—	(1)	—
31 years or more	5	5	—	14	5	5	6	3	—	—	(3)	(1)
Base	(279)	(187)	(28)	(28)	(19)	(18)	(111)	(76)	(14)[a]	(14)[a]	(15)[a]	(13)[a]
Median years of service	**20**	**20**	**17-18**	**18**	**20**	**20**	**20**	**15**	**12**	**20**	**20**	**18**
Don't know[1]	33%	35%	30%	33%	30%	25%	30%	43%	33%	26%	35%	32%
Base	(427)	(294)	(40)	(42)	(27)	(24)	(159)	(135)	(21)	(19)	(23)	(19)

[a] Base too small for percentages to be meaningful. Therefore, actual numbers appear.

[1] The percentage responding "Don't know" is based on all those giving some response to the question.

[2] Percentages do not add to 100 percent due to rounding.

Appendix Table 12: The Next CEO's Years of Service with the Company, by Top-Management Model

Years of Service	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*
1 year or less	2%	2%	—	—
2 to 5 years	6	5	8%	8%
6 to 10 years	16	11	19	12
11 to 15 years	18	24	19	8
16 to 20 years	22	20	24	17
21 to 25 years	14	22	15	38
26 to 30 years	9	11	12	17
31 years or more	13	5	3	—
Base	(55)	(81)	(100)	(24)
Don't know[1]	31%	35%	35%	25%
Base	(80)	(124)	(153)	(32)

[1] The percentage responding "Don't know" is based on all those giving some response to the question.

Appendix Table 13: Will Next CEO Have Service with Acquired or Merged Firm?, by Industry, Size of Company, and Top- Management Model

Service with Acquired or Merged Firm	Total	Manu-facturing[1]	Banks	Insurance[1]	Retailing	Utilities	Manufacturing[1] 500 Largest	Manufacturing[1] Next 500	Banks 50 Largest	Banks 50 Medium Large	Insurance 50 Largest[1]	Insurance 50 Medium Large[1]	Functional Managers Model	Mix of Managers Model	Business Managers Model	Asset and Resource Managers Model
Yes	8%	8%	3%	10%	11%	—	12%	4%	—	5%	4%	16%	7%	5%	10%	9%
No	67	62	75	67	74	88%	62	62	76%	74	78	53	74	69	62	67
Don't know	25	29	22	24	15	12	26	33	24	21	17	32	19	26	28	24
Base	(420)	(294)	(40)	(42)	(27)	(24)	(158)	(136)	(21)	(19)	(23)	(19)	(81)	(124)	(158)	(33)

[1] Percentages do not add to 100 percent due to rounding.

Appendix Table 14: Three Characteristics Needing Special Emphasis When Choosing Next CEO, by Industry and Size of Company

Characteristics	Total	Manu-facturing	Banks	Insurance	Retailing	Utilities	Manufacturing 500 Largest	Manufacturing Next 500	Banks 50 Largest	Banks 50 Medium Large	Insurance 50 Largest	Insurance 50 Medium Large
Personal leadership style	1	1	1	1	1	1	1	1	1	1	1	1
Aggressive, competitive outlook	2	2	3	3	2	2.5[a]	2	2	2	—	—	2
Knowledge of how this business operates	3.5[a]	—	2	2	4[a]	—	—	—	—	2	2	3
Experience as a general manager	3.5[a]	3	—	—	—	—	—	—	—	3	—	—
Knowledge of how this company operates	—	—	—	—	4[a]	—	3	—	—	—	—	—
Experience dealing with governments and other external forces and groups	—	—	—	—	—	2.5[a]	—	—	—	—	—	—
Strategic planning experience	—	—	—	—	4[a]	—	—	—	3	—	—	—
Entrepreneurial flair	—	—	—	—	—	—	—	3	—	—	3	—
Base	(326)	(220)	(27)	(35)	(19)	(20)	(117)	(109)	(16)	(13)	(19)	(16)

[a] Tied.

Appendix Table 15: Three Characteristics Needing Special Emphasis When Choosing Next CEO, by Top-Management Model

Characteristics	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*
Personal leadership style	1	1	1	1
Aggressive, competitive outlook	2	3.5[a]	2	2
Knowledge of how this business operates	3	2	—	3.5[a]
Knowledge of how this company operates	—	—	—	3.5[a]
Experience as a general manager	—	—	3	—
Entrepreneurial flair	—	3.5[a]	—	—
Base	(65)	(100)	(116)	(26)

[a] Tied.

Appendix Table 16: Number of Executives Named in the Corporate-Level Succession Plan, by Industry and Size of Company[1]

							Manufacturing	
Number	*Total*	*Manufacturing*[2]	*Banks*[2]	*Insurance*	*Retailing*	*Utilities*	*500 Largest*	*Next 500*
3 to 10	26%	25%	39%	—	(4)	(2)	19%	41%
11 to 20	17	18	6	(5)	(2)	—	15	24
21 to 30	23	20	33	(1)	(3)	(2)	22	16
31 to 50	13	10	6	(2)	(2)	(5)	12	8
51 to 100	8	9	6	(2)	(1)	(3)	11	3
more than 100	13	17	11	—	—	—	21	8
Base	(173)	(124)	(18)	(10)[a]	(12)[a]	(12)[a]	(87)	(37)
Median number	25	25	25	21	21	40	30	20

[a] Base is too small to allow calculation of meaningful percentages. Therefore, actual numbers are used.

[1] Size comparison for manufacturing only.

[2] Percentages do not add to 100 percent due to rounding.

Appendix Table 17: Usefulness of Formal Succession and Development Planning in Ensuring Top-Management Continuity and Effectiveness, by Industry and Size of Company[1]

A. CEO's evaluation of usefulness	*Total*	*Manufacturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*	*Manufacturing*	
							500 Largest	*Next 500*
Essential	35%	36%	(4)	—	(5)	(6)	45%	15%
Generally useful	44	43	(8)	(4)	(3)	(7)	42	44
A mixed bag	16	16	(2)	(4)	(1)	(1)	10	32
Not particularly useful	4	4	(1)	(1)	—	—	2	9
Often a waste of time	—	—	—	—	—	—	—	—
Base	(164)[b]	(121)[b]	(15)[a]	(9)[a]	(9)[a]	(14)[a]	(87)[b]	(34)
B. How CEO expects usefulness to change during the next few years								
Likely to become more useful	73%	73%	67%	(9)	(9)	(9)	72%	74%
About the same	27	27	33	(1)	(1)	(5)	28	26
Likely to become less useful	—	—	—	—	—	—	—	—
Base	(179)	(131)	(18)	(10)[a]	(10)[a]	(14)[a]	(93)	(38)
C. Was sucession plan followed when the last top-management position (other than CEO) was filled?								
Yes	48%	48%	45%	(2)	(6)	(8)	56%	30%
No	29	29	35	(3)	(3)	(3)	22	46
In part	23	23	20	(5)	(1)	(3)	22	25
Base	(198)	(148)	(20)	(10)[a]	(10)[a]	(14)[a]	(104)	(44)[b]

[a] Base is too small to allow calculation of meaningful percentages. Therefore, actual numbers are used.

[b] Percentages do not add to 100 percent due to rounding.

[1] Size comparison for manufacturing only.

Appendix Table 18: Kinds of Executives Developed Effectively by the Formal Succession and Development-Planning Program, by Industry, Size of Company, and Top-Management Model[1]

							Manufacturing		Top Management Model			
Kinds of executives	*Total*	*Manu-facturing*	*Banks*	*Insurance*	*Retailing*	*Utilities*	*500 Largest*	*Next 500*	*Functional Managers Model*	*Mix of Managers Model*	*Business Managers Model*	*Asset and Resource Managers Model*
General managers	94%	95%	94%	(9)	(9)	(13)	98%	87%	96%	95%	95%	(12)
Functional specialists	66	69	56	(5)	(7)	(9)	68	72	70	66	69	(8)
Business strategists	31	25	33	(4)	(6)	(7)	30	13	41	33	29	(3)
Entrepreneurs	13	12	6	(2)	(2)	(2)	14	8	7	16	9	(4)
Other	5	4	—	(2)	—	(1)	3	8	—	7	3	(2)
None of the above	1	2	—	—	—	—	2	—	—	—	3	—
Base	(184)	(132)	(18)	(10)[a]	(10)[a]	(14)[a]	(93)	(39)	(27)	(58)	(77)	(14)[a]

[a] Base too small to allow calculation of meaningful percentages. Therefore, actual numbers are used.

[1] Size comparison for manufacturing only.

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Social Security: Problems and Solutions

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INTEREST AND CONCERN about the financial integrity of the social security system has been mounting steadily since the mid 1970's, and has become especially acute in the past year or two. While there have been numerous reports by study groups, and comments in the media abound, a lack of understanding of the issues apparently still persists.

According to recent nationwide surveys, a majority of working people have little or no confidence that there will be funds to pay their benefits when they retire.[1] Certainly, some of the predictions that have appeared in the media in recent years—foreboding bankruptcy and the imminent collapse of the social security system—have contributed to an erosion of confidence in the program. The aim of this report is to provide a brief overview of the social security system's philosophy and functioning, the nature and causes of both the short-term deficits and the projected longer range deficits—and the variety of viable solutions available for restoring the system's financial soundness.

Introduction

THE SOCIAL SECURITY SYSTEM, created by Congress in 1935, experienced relatively smooth sailing during the first four decades of its existence and, consequently, aroused little anxiety about fiscal soundness. But, by the mid-1970's, when deficits were registered, the sanguine attitude toward the program dissipated and was replaced by an atmosphere of uneasiness.

Triggered by the 1974-1975 recession, unemployment rose and has remained at high levels ever since.[2] Moreover, persistent inflation has accompanied the high unemployment rates.[3] As a consequence of the confluence of these two phenomena—high rates of unemployment and of inflation—more money was being paid out by the system than was received. (High unemployment rates reduce the amount collected through payroll taxes. Inflation increases the amount paid out by the system since social security benefits are raised automatically each year to reflect increases in the cost of living as measured by the CPI.)

In each year since 1975, total payments to OASI (Old Age and Survivors Insurance) beneficiaries exceeded the amounts collected for OASI through payroll taxes. As a result, by the end of 1981, the OASI fund had shrunk to the equivalent of two-and-a-half months' disbursements—compared with slightly more than one year's disbursements at the end of 1971. In December, 1981, when official estimates indicated that the OASI reserve fund would be virtually depleted before the end of 1982, Congress passed legislation permitting the OASI trust fund to borrow from the disability and medicare funds, which still had surpluses. Such interfund borrowing was a short-term, ad hoc measure applying specifically to 1982.

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[1] Two studies by Louis Harris and Associates, Inc., *Aging in the Eighties: America in Transition.* Washington, D.C.: The National Council on the Aging, Inc., 1981; and *1979 Study of American Attitudes Toward Pensions and Retirement.* New York: Johnson & Higgins, 1979; and another by Peter D. Hart Research Associates, Inc., *A Nationwide Survey of Attitudes Toward Social Security.* Washington, D.C.: The National Commission on Social Security, 1980.

[2] From 1975 through 1981, the annual unemployment rate ranged between 5.8 percent and 8.5 percent, or an average of 7.1 percent for the seven-year period. In the first seven months of this year, it stood at a seasonally adjusted rate of 9.2 percent. These levels are substantially above those prevailing in the 1960's when the annual unemployment rate held between 3.5 percent and 6.7 percent, or an average of 4.8 percent.

[3] From 1974 through 1981, the CPI (Consumer Price Index) showed increases from the preceeding year that ranged between 5.8 percent to 13.5 percent, or an average of 9.4 percent for the eight-year interval. In contrast, from 1958 through 1967, annual increases in the CPI never exceeded 2.9 percent, and averaged 1.7 percent for the entire ten-year period.

Underlying Philosophy and Goals of the Social Security System

THE ARCHITECTS of the U.S. social security system envisioned a structure that would provide a floor of protection to workers and their families against the loss of earnings resulting from a wage earner's retirement, disability or death. The structure sought to combine two principles that are often incompatible—individual equity and social adequacy.

On an individual equity basis, payments to a beneficiary are directly related to, and commensurate with, the premiums paid. Had the social security system been based strictly on equity, an individual's benefits would be determined solely by his or her contribution levels. But this is not the case.

From its very beginning, the underlying aim of the program has been to relate benefits to earnings (and to payroll taxes paid)—the individual equity principle—but also to weight benefits in favor of workers with low lifetime earnings—the social adequacy principle. Therefore low-wage earners receive smaller absolute benefits compared with higher wage earners, but these benefits represent a higher proportion of their earnings. The intention of this feature is for low-wage earners to receive a level of benefits that provides at least the basic necessities of life. If the social security benefits were based strictly on individual equity, many more might well require public assistance. Another concession to social adequacy is that married workers are subject to the same payroll tax rates as single workers—but receive broader coverage since their dependents also receive benefits. The rationale is that married workers have greater expenses than single workers and thus are entitled to receive higher earnings-replacement rates.[4]

Among its other features, social security is compulsory for most types of employment and is national in scope. Social security now covers 116 million workers—compared with 35 million in 1940. Of today's 36 million OASDI beneficiaries, 56 percent are retired workers; 8 percent are disabled workers; and the remaining 36 percent are auxiliary beneficiaries. (Auxiliary beneficiaries comprise the spouse and children of a retired or disabled worker, or survivors of a deceased worker.)

Initially, the system embraced only persons employed in commerce and industry. Over the years, Congress extended the system to include farm and domestic workers, the self-employed, most employees of nonprofit organizations, most state and local government employees, members of the military services, and other miscellaneous groups. (Coverage of employees of state and local governments and nonprofit organizations is optional.) Employees of the Federal Government, some state and local governments, some nonprofit organizations, and railroad workers covered by the Railroad Retirement Act comprise the majority of workers not covered by the system. There is also a relatively small number of workers who are not covered by social security because their earnings are too low. Currently, about 95 percent of those workers reaching 65 years of age are eligible for social security retirement benefits.

Social security is a self-contained system financed by contributions of employers, employees and the self-employed. Moreover, it is a pay-as-you-go program whereby current workers and employers, through payroll taxes, pay for the benefits of current beneficiaries. The three trust funds—OASI (Old Age and Survivors Insurance), DI (Disability Insurance), and HI (Hospital Insurance)—serve as contingency reserves.[5] When expenditures exceed revenues—in periods of recession, for example—these reserves allow the system to meet its full obligations. While there is no firm agreement on the precise minimum level of contingency reserves needed to keep the system solvent, opinions of the experts range between three months and one year of estimated annual outlays.

The Immediate Outlook

The 1982 Annual Report of the Social Security Board of Trustees presents four sets of projections. Alternative I is described as optimistic, Alternatives II-A and II-B are regarded as intermediate, and Alternative III is characterized as pessimistic (Chart 1 on page 9). Each projection is based on a different set of economic and demographic assumptions (Tables 1 and 2). Alternative II-B, the less optimistic of the two intermediate projections, is regarded by the actuaries of the Social Security Administration as the most realistic of the four.

Under all four sets of projections, according to the Trustees' Report, the OASI trust fund will be too low to pay benefits on time by July, 1983. Even if interfund borrowing were authorized beyond 1982 and the OASI trust fund were to continue borrowing from the DI and the HI trust funds, it is estimated, under II-B assumptions, that the combined assets of the three funds would be insufficient to meet projected expenditures by some

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[4] For a discussion of major social programs in the United States—welfare programs as well as social insurance programs—see Robert D. Reischauer, *The Impact of Social Welfare Policies in the United States*. Edgar Fiedler, editor, The Conference Board, Report No. 823, 1982.

[5] The Secretary of the Treasury, the Secretary of Labor, and the Secretary of Health and Human Services constitute the three-member Board of Trustees of the social security trust funds. They produce an annual report on the current financing status of the trust funds together with projections for the future based on different scenarios.

Table 1: Selected Demographic Assumptions for Selected Years, 1960-2060

		Life expectancy[2]			
	Total fertility rate[1]	*At birth*		*At age 65*	
Calendar year		*Male*	*Female*	*Male*	*Female*
Past experience:					
1960	3.61	66.7	73.4	13.0	16.1
1965	2.88	66.8	74.1	13.0	16.6
1970	2.43	67.1	74.9	13.2	17.2
1975	1.77	68.7	76.5	13.7	18.1
1980	1.84	69.8	77.7	14.3	18.7
Alternative I:					
1985	1.96	70.4	78.3	14.5	19.1
1990	2.07	70.9	78.9	14.8	19.4
1995	2.18	71.2	79.2	14.9	19.7
2000	2.29	71.4	79.4	15.0	19.8
2010	2.40	71.6	79.6	15.2	20.0
2030	2.40	72.0	80.1	15.5	20.4
2050	2.40	72.4	80.6	15.7	20.8
2060	2.40	72.6	80.8	15.9	21.0
Alternatives II-A and II-B:					
1985	1.90	71.0	78.9	14.8	19.5
1990	1.95	71.9	80.0	15.3	20.3
1995	2.00	72.6	80.8	15.6	20.8
2000	2.05	72.9	81.1	15.8	21.1
2010	2.10	73.4	81.6	16.1	21.6
2030	2.10	74.2	82.6	16.7	22.4
2050	2.10	75.0	83.6	17.3	23.2
2060	2.10	75.4	84.1	17.6	23.6
Alternative III:					
1985	1.85	72.1	80.2	15.3	20.4
1990	1.79	74.0	82.5	16.3	22.1
1995	1.76	75.3	84.1	17.0	23.5
2000	1.73	75.9	84.9	17.4	24.2
2010	1.70	76.8	86.0	18.1	25.1
2030	1.70	78.5	88.3	19.5	27.2
2050	1.70	80.2	90.6	20.8	29.3
2060	1.70	81.0	91.8	21.5	30.4

[1] The total fertility rate for any year is the average number of children who would be born to a woman in her lifetime if she were to experience the birth rates by age observed in, or assumed for, the selected year, and if she were to survive the entire child-bearing period.

[2] The life expectancy for any year is the average number of years of life remaining to a person at a specified age.

Source: *1982 Annual Report of Trustees of the Board of the Federal Old-Age and Survivors Insurance and Disability Trust Funds*, p. 35.

time in 1984—assuming no legislative changes. Thus, the report concludes that interfund borrowing will not solve the short-term financing problem by itself.

Among the recommendations that will doubtless receive serious consideration by Congress in addressing the short-term deficits are: revising the method for indexing benefits for inflation; establishing universal social security coverage; using general revenues to finance medicare; taxing social security benefits; and raising payroll taxes. The National Commission on Social Security Reform is currently preparing a report that will offer remedies for both the short-range and long-range deficits in the social security system. The Commission was established by the President in December, 1981.[6] Its mission is to examine the current and long-range financial condition of the social security trust funds, identify and analyze the problems, and make recommendations that have the objective of assuring a financially sound social security system that provides "appropriate benefits." While its report is due by December 31, 1982, it is expected that it will be made available in November. After the November elections but

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[6] The bipartisan Commission comprises fifteen members chosen by the President, Majority Leader of the Senate, and the Speaker of the House of Representatives—each of whom provided five selections.

Table 2: Selected Economic Assumptions for Selected Years, 1960-2060

	Average annual percentage increase in					
Calendar year	*Real GNP*[1]	*Average wages in covered employment*	*Consumer price index*	*Real-wage differential*[2] *(percent)*	*Average annual interest rate*[3] *(percent)*	*Average annual unemployment rate (percent)*
Past experience:						
1960-1964	4.0	3.4	1.3	2.1	3.7	5.7
1965-1969	4.4	5.4	3.4	2.0	5.2	3.8
1970	− .2	4.9	5.9	−1.0	7.3	4.9
1975	−1.1	6.6	9.1	−2.5	7.4	8.5
1976	5.4	8.2p	5.7	2.5p	7.1	7.7
1977	5.5	8.0p	6.5	1.5p	7.1	7.0
1978	4.8	8.2p	7.6	.6p	8.2	6.0
1979	3.2	8.8p	11.4	2.6p	9.1	5.8
1980	− .2	8.6p	13.5	−4.9p	11.0	7.1
Alternative I:						
1981	2.1a	8.8	10.3	−1.5	13.3	7.6
1985	5.1	7.0	4.2	2.8	6.6	5.8
1990	4.0	5.2	2.2	3.0	5.3	4.3
1995	3.4	4.5	2.0	2.5	5.1	4.0
2000 & later	3.5b	4.5	2.0	2.5	5.1	4.0
Alternative II-A:						
1981	1.9a	8.8	10.3	−1.5	13.3	7.6
1985	4.8	7.4	4.8	2.6	9.8	6.4
1990	3.7	6.0	3.5	2.5	6.0	5.0
1995	3.0	5.0	3.0	2.0	5.6	5.0
2000 & later	3.1b	5.0	3.0	2.0	5.6	5.0
Alternative II-B:						
1981	1.8a	8.6	10.3	−1.7	13.3	7.6
1985	3.0	6.9	6.6	.3	8.0	7.7
1990	3.0	6.0	4.5	1.5	6.4	6.1
1995	2.5	5.5	4.0	1.5	6.1	5.0
2000 & later	2.6b	5.5	4.0	1.5	6.1	5.0
Alternative III:						
1981	1.8a	8.6	10.3	−1.7	13.3	7.6
1985	3.8	9.2	9.2	.0	9.4	8.8
1990	2.7	8.0	7.2	.8	7.6	6.9
1995	1.8	6.2	5.2	1.0	6.7	6.0
2000 & later	2.1b	6.0	5.0	1.0	6.6	6.0

[1] The real GNP (Gross National Product) is the total output of goods and services expressed in constant dollars.

[2] The difference between the percentage increase in average annual wages in covered employment and the percentage increase in the average annual CPI.

[3] The average of the interest rates determined in each of the 12 months of the year for special public-debt obligations issuable to the trust funds.

[a] The actual value of the 1981 increase in real GNP was 2.0 percent. This value was not available at the time the cost estimates were prepared; the cost estimates were based on the assumed increases in real GNP shown under the four alternatives.

[b] This value is for the year 2000. The annual percentage increase in real GNP is assumed to continue to change after 2000 under each alternative to reflect the dependence of labor force growth on the size and age-sex distribution of the population. The percentage increases for 2060 are 3.4, 2.5, 2.1, and 1.0 for alternatives I, II-A, II-B, and III, respectively.

[p] Preliminary.

Source: *1982 Annual Report of Trustees of OASDI Trust Funds*, pp. 32 and 33.

before year-end, Congress will be pressed to pass legislation to redress the shortfalls that are otherwise projected to occur during the next several years. The expectation is that the recommendations of the Commission will play an important role in the formulation of such legislation.

Table 3: Comparison of OASDI Beneficiaries And Covered Workers for Selected Years, 1945-2060

Calendar year	Covered workers[2] (in thousands)	Beneficiaries[1] (in thousands) OASDI[3]	DI[4]	Total	Covered workers per OASDI beneficiary	Beneficiaries per 100 covered workers
1945	46,390	1,106	a	1,106	41.9	2
1950	48,280	2,930	a	2,930	16.5	6
1960	72,530	13,740	522	14,262	5.1	20
1970	93,090	22,618	2,568	25,186	3.6	28
1980	114,300p	30,384	4,734	35,118	3.3p	31p
Alternative I:						
1982	116,004	31,476	4,370	35,845	3.2	31
1990	137,093	36,069	4,053	40,122	3.4	29
2000	146,513	38,585	4,803	43,388	3.4	30
2005	151,749	40,066	5,506	45,572	3.3	30
2010	155,761	43,234	6,140	49,374	3.2	32
2015	158,066	48,449	6,552	55,001	2.9	35
2020	159,894	54,608	6,722	61,330	2.6	38
2030	167,424	64,647	6,404	71,051	2.4	42
2040	178,967	65,587	6,679	72,266	2.5	40
2050	191,223	66,554	7,289	73,843	2.6	39
2060	205,183	69,974	7,676	77,650	2.6	38
Alternative II-A:						
1982	115,955	31,482	4,375	35,857	3.2	31
1990	133,921	36,431	4,126	40,557	3.3	30
2000	144,133	39,823	5,193	45,016	3.2	31
2005	148,771	41,745	6,031	47,776	3.1	32
2010	151,577	45,376	6,753	52,129	2.9	34
2015	152,296	51,070	7,205	58,275	2.6	38
2020	152,100	57,789	7,372	65,161	2.3	43
2030	154,100	69,188	6,946	76,134	2.0	49
2040	158,430	71,497	7,073	78,570	2.0	50
2050	162,023	73,079	7,392	80,471	2.0	50
2060	166,318	75,258	7,422	82,680	2.0	50
Alternative II-B:						
1982	115,308	31,483	4,374	35,857	3.2	31
1990	132,410	36,428	4,138	40,566	3.3	31
2000	142,248	39,814	5,191	45,005	3.2	32
2005	146,798	41,725	6,028	47,753	3.1	33
2010	149,515	45,359	6,748	52,107	2.9	35
2015	150,148	51,048	7,198	58,246	2.6	39
2020	149,873	57,75[illegible]	7,361	65,114	2.3	43
2030	151,750	69,138	6,934	76,072	2.0	50
2040	156,015	71,440	7,061	78,501	2.0	50
2050	159,545	73,034	7,380	80,414	2.0	50
2060	163,778	75,215	7,410	82,625	2.0	50
Alternative III:						
1982	115,178	31,496	4,376	35,872	3.2	31
1990	130,300	37,125	4,246	41,371	3.1	32
2000	140,370	42,415	5,560	47,975	2.9	34
2005	144,254	45,360	6,510	51,870	2.8	36
2010	145,600	50,080	7,293	57,373	2.5	39
2015	144,295	56,934	7,759	64,693	2.2	45
2020	141,475	64,913	7,898	72,811	1.9	51
2030	136,560	79,327	7,324	86,651	1.6	63
2040	132,593	84,945	7,214	92,159	1.4	70
2050	126,971	89,022	7,071	96,093	1.3	76
2060	121,968	90,672	6,587	97,259	1.3	80

[1] Beneficiaries with monthly benefits in current-payment status as of June 30.

[2] Workers with taxable earnings at some time during the year.

[3] Retired-worker beneficiaries and their spouses, and children and survivors of retired, disabled and deceased workers.

[4] Disabled-worker beneficiaries and their spouses and children.

[a] Disability benefits did not become available until 1957.

p—Preliminary.

Source: *1982 Annual Report of Trustees of OASDI Trust Funds*, pp. 65 and 66.

Table 4: Estimated Cost Rates of the OASDI System under Alternative II-B and Comparison with Tax Rates, Years 1982-2060

(as percent of taxable payroll)

Calendar year	*Estimated cost rate*			*Scheduled*	
	OASI	*DI*	*Total*	*Tax rate*	*Difference*[1]
Alternative II-B:					
1982	10.42	1.36	11.78	10.80	−0.98
1983	10.38	1.27	11.65	10.80	− .85
1984	10.42	1.21	11.63	10.80	− .83
1985	10.52	1.18	11.70	11.40	− .30
1986	10.55	1.16	11.71	11.40	− .31
1987	10.57	1.14	11.71	11.40	− .31
1988	10.56	1.12	11.68	11.40	− .28
1989	10.55	1.11	11.66	11.40	− .26
1990	10.54	1.10	11.64	12.40	.76
1991	10.49	1.10	11.59	12.40	.81
1992	10.43	1.11	11.54	12.40	.86
1993	10.39	1.12	11.51	12.40	.89
1994	10.33	1.13	11.46	12.40	.94
1995	10.27	1.14	11.42	12.40	.98
1996	10.18	1.17	11.35	12.40	1.05
1997	10.07	1.20	11.27	12.40	1.13
1998	9.96	1.23	11.19	12.40	1.21
1999	9.85	1.25	11.10	12.40	1.30
2000	9.75	1.28	11.03	12.40	1.37
2001	9.66	1.30	10.96	12.40	1.44
2002	9.58	1.32	10.90	12.40	1.50
2003	9.52	1.35	10.87	12.40	1.53
2004	9.48	1.39	10.87	12.40	1.53
2005	9.50	1.44	10.95	12.40	1.45
2006	9.53	1.46	10.99	12.40	1.41
2010	9.94	1.59	11.53	12.40	.87
2015	11.12	1.69	12.82	12.40	− .42
2020	12.72	1.73	14.44	12.40	−2.04
2025	14.29	1.68	15.97	12.40	−3.57
2030	15.23	1.60	16.83	12.40	−4.43
2035	15.45	1.57	17.02	12.40	−4.62
2040	15.20	1.59	16.80	12.40	−4.40
2045	15.03	1.63	16.66	12.40	−4.26
2050	15.09	1.63	16.72	12.40	−4.32
2055	15.21	1.60	16.81	12.40	−4.41
2060	15.22	1.59	16.81	12.40	−4.41
25-year averages:					
1982-2006	10.14	1.23	11.37	12.01	.64
2007-2031	12.43	1.65	14.08	12.40	−1.68
2032-2056	15.20	1.61	16.81	12.40	−4.41
75-year average:					
1982-2056	12.59	1.50	14.09	12.27	−1.82

[1] The tax rate minus the OASDI cost rate. Positive differences are referred to as surpluses, and negative differences, as deficits.

Source: *1982 Annual Report of Trustees of OASDI Trust Funds*, p. 64.

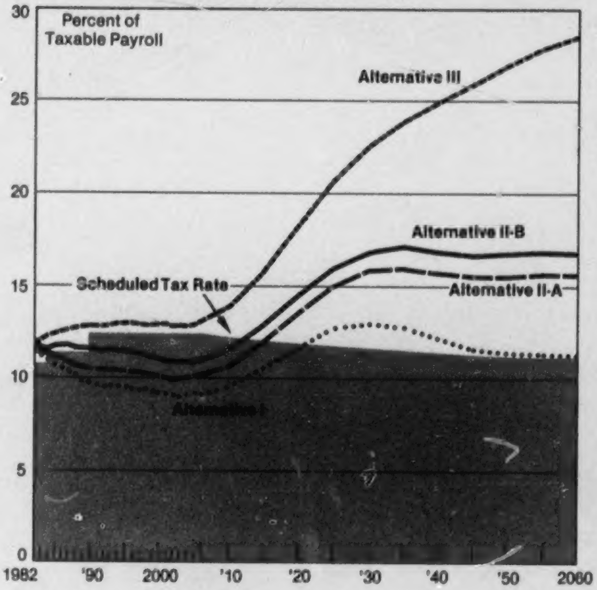
Mid-Range and Longer Range Outlook

Once the short-range funding problem is solved—by the late 1980's or early 1990's—the income of the OASI and DI programs for the succeeding 20 years is likely to rise faster, on average, than the expenditures of the two programs, according to the projections of the Trustees' report. All the alternatives—except Alternative III—project that the combined OASI and DI trust funds should be financially sound from approximately 1990 to 2010 (Chart 1).

Starting around 2010, when the "baby boom" generation begins to retire, the number of beneficiaries will grow at a substantially faster pace than the number of covered workers. Consequently, by 2010, the number of covered workers per OASDI beneficiary—which has been hovering between 3.2 and 3.4 in recent years and is expected to remain at those levels for the next quarter of a century—will start falling significantly. According to the Alternative II-B projection, the number of workers per beneficiary will drop from 3.1 in 2005 to 2.0 by 2030. Conversely, for every 100 workers paying social security taxes, there would be 33 beneficiaries in 2005 compared to 50 in 2030 (Table 3 on page 7).

By the year 2015 it is expected, under Alternative II-B, that OASDI expenditures will again outstrip OASDI revenues from payroll taxes—and deficits will start to mount unless legislative changes intervene (Table 4). Some of the major recommendations to restore the social security system's fiscal integrity appear in the following pages.

Chart 1: Estimated Cost Rates of the OASDI System Under Four Alternative Projections Compared with Scheduled Rates, 1982-2060



Source: 1982 Annual Report of Trustees of OASDI Trust Funds, Table 29

Recommendations for Eradicating the Deficits

WHILE A PLETHORA of remedies for both the short-term and long-term deficits have been offered by a wide range of concerned private organizations, government agencies, special study groups, congressional committees, and individuals, the following discussion is confined to what are considered major recommendations. A major recommendation, in this context, is one that is expected to make a sizable contribution toward the elimination of deficits.

Each recommendation is presented with arguments for and against it. Even though these pros and cons represent the perceptions of informed groups or individuals, some may contain statements that are, in fact, popular misconceptions or unproven speculations. When any of the pros or cons contains a factual error or an untested assumption, the author indicates this in *italic* type. Also, when further comment or explanation regarding an argument seems appropriate, the author will present that in *italics* as well.

Raising the Retirement Age

Raising the age for receipt of full social security retired-worker benefits, which is currently 65, has been one of the most common recommendations for easing the upward pressure on costs of the social security system.[7] Suggestions of what the revised age should be generally cluster around three figures—67, 68, and 70. However, 68 is favored by most of the supporters of this recommendation.

While a variety of ways of accomplishing such a change have been offered, perhaps the two most prevalent are: (1) raise the age for unreduced benefits from 65 to 68 and, for actuarially reduced benefits, from 62 to 65; or (2) raise the eligibility age for full benefits to 68, while allowing actuarially reduced benefits to continue to be available starting at age 62.[8]

In the first option, benefits would be reduced by 6 2/3 percent for each year of entitlement before age 68.[9] Therefore, at age 65, benefits would be 80 percent of the unreduced amount that would otherwise be received at age 68. In the second option, the actuarial reduction would be available beginning at age 62, when the recipient would get 60 percent of the unreduced benefit. (Currently, retirement at age 62 entitles the recipient to benefits that are 80 percent of the full amount that would be received at age 65.)

The overwhelming majority of the proponents of raising the entitlement age include the proviso that its introduction not be precipitous. Such legislation, they stress, must not affect workers who are approaching retirement since ample time has to be allowed for current workers to plan for such a fundamental change. The National Commission on Social Security recommended that the transition to age 68 should not begin until the year 2000, at which time it would start being phased in by raising the age of eligibility for full benefits by a quarter of a year annually.[10] Therefore, by the year 2012, the new ages—68 for full benefits and 65 for actuarially reduced benefits—would become fully effective. The President's Commission on Pension Policy suggested that the 12-year phase-in period start in 1990.[11]

The primary arguments offered by advocates of raising the age of eligibility are:

(1) People are living longer today then they did some 40 years ago when social security retired-worker benefits first became available. Official estimates show that life expectancy at age 65 has risen by three-and-a-half years in the past four decades—it was 12.8 years in 1940 compared to 16.4 years in 1980.[12] Hence, on average, people at age 68 today have at least as many remaining years of life as their counterparts had at age 65 forty years ago. Moreover, the average number of years of remaining life at age 65 is expected to continue to inch up in the decades ahead. According to the middle-range projections of the Office of the Actuary of the Social Security Administration, persons aged 65 in the year 2010 may be expected to live, on average, 19.0 years, or 2.6 years more than today.[13]

(2) Older people are in better health than they were 40 years ago. *While this argument has been propounded by*

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[7] Some of the major advocates of this proposal are: National Commission on Social Security; The President's Commission on Pension Policy; The Advisory Council on Social Security; Committee for Economic Development; The Business Roundtable.

[8] On average, the lifetime yield of benefits that are actuarially reduced is equivalent to the lifetime yield of unreduced benefits.

[9] The reduction would be at the rate of 5/9 of 1 percent monthly, or 6 2/3 percent annually.

[10] The National Commission on Social Security—not to be confused with the more recently formed National Commission on Social Security Reform, mentioned earlier—was a bipartisan commission of nine private citizens formed by Congress in December, 1977. Its task was to conduct an intensive study of the social security system and related programs. The Commission's findings and recommendations appear in its final report, *Social Security in America's Future,* March, 1981.

[11] The President's Commission on Pension Policy was created in 1979—for a two-year period—to study U.S. retirement, survivor and disability systems and to propose recommendations for national retirement income policies. Its final report in February, 1981, was *Coming of Age: Toward a National Retirement Income Policy.*

[12] In 1940, it was 12.1 years for men and 13.6 for women; in 1980, it was 14.1 and 18.4, respectively.

[13] In 2010, life expectancy at age 65 is 21.6 years for women and 16.1 years for men.

several groups, its accuracy is still problematic. (See item 1 below.)

(3) Raising the retirement age would yield benefits beyond cost saving. Work is intrinsically beneficial for older people who are in reasonably good health, and those who remain in the labor force are happier and stay healthy longer than their counterparts who retire. *This is apparently a widespread perception, but whether it is an accurate one has not yet been established.* (See item 2 below.)

(4) Demand for older workers will start to pick up later in this decade as the growth in the labor force starts decelerating, reflecting the low birth rates since the mid-1960's.

But those opposed to raising the age of eligibility point out that:

(1) Increased longevity, together with substantial medical advances during the past four decades, does not constitute evidence that older persons are healthier today than they were in 1940. Advances in medical technology and drug therapy may have been influential in prolonging life so that the proportion of people surviving into their seventies and eighties and beyond has been steadily growing. However, it does not follow ipso facto that they are in better health than their counterparts of a generation or two ago.

It could be argued that persons who survived to their seventies or eighties a generation or two ago without pacemakers, by-pass surgery, chemotherapy and a host of other life-extending mechanisms were, on average, in better health than persons of a comparable age who have had the advantage of such technology. Whether people in their 60's and 70's and older today are generally in better health than their counterparts a generation or two ago has not been verified. As yet, there are no concrete data that either confirm or refute the claim.

(2) There is no evidence to support the assertion that persons who work into their late sixties and early seventies and later are in better health—physically or psychologically—than they would be if they had retired. Work that is fulfilling and satisfying may well have a positive impact on the health—and perhaps even on the length of life—of an older person. But work that is enervating, tedious or physically onerous is more likely to be deleterious, rather than conducive, to health.

Not enough is yet known about the effect of retirement itself on health. Perhaps one could even speculate that, for most people, retirement, rather than being detrimental, has a salutary influence on health and length of life. The added years of life expectancy in the past four decades have been concomitant with the trend toward early retirement. Could early retirement have contributed to longer life expectation at age 65? Until there is more research on this subject there can be only speculation on the comparative effects of work and retirement on the physical and psychological well-being of older persons.

It does seem, however, that the relative benefits of work and retirement are a singularly individual matter. For some, it may be more satisfying to work until life's end; for others, it may be preferable to retire quite early, for example, at 55; and for still others, the optimal arrangement may lie somewhat between these two extremes. Among the many influences that impinge on the retirement decision are state of health, finances, number of dependents, degree of job satisfaction, breadth of interests that affect the number and kind of options available in retirement, and, of course, personality traits. Personality traits, or psychological factors, include the degree to which one's job or occupation is central to one's self-esteem or even to one's identity, the degree of optimism or pessimism with which one is imbued, attitude toward risk taking, and ability to cope with change.

(3) It would constitute a breach of faith with workers who are now contributing to the system and expect to be eligible for full retirement benefits at age 65.

(4) Ramifications of raising the retirement age need to be more carefully studied. If the consequences of such a legislative change are not fully identified and evaluated, there exists the danger of enacting legislation whose negative, unintended fallout would minimize, counteract or even outweigh the positive outcome that was intended. To avert such a development, answers to many questions are crucial. Some of these are:

How would raising the age of eligibility for full benefits affect the labor force participation rates of persons aged 55-59, 60-61, 62-64, 65-67, and 68 and over? What would be the magnitude of its impact on the finances of the social security system? Even if substantial savings in OASI are achieved, would they be counterbalanced by increased costs in other programs?

Since a substantial portion of persons who retire between the ages of 62 and 65 have health problems that preclude their working, the abrogation or sharp reduction of early retirement benefits could yield far smaller net savings in government outlays than had been forecast. To what extent would expenditures for disability benefits and other income maintenance programs, such as supplemental security income, unemployment benefits, and in-kind assistance (food stamps, medicaid and housing subsidies) wash out savings in OASI expenditures?

If labor-force participation rates of older persons rose considerably, how would it affect the career paths of younger workers? What would be industry's response to raising the age for full social security retired-worker benefits? Would it alter their pension plans—would benefits accrue between ages 65 and 68, or would they be frozen at age 65? What would be the effect on corporate payroll outlays for social security? Would corporate *pension plans contain attractive provisions for early retirement, as many have now, or would they tend to institute penalties for early retirement, or would they make available attractive incentives to remain on the job beyond age 65?*

A former Commissioner of Social Security had this to say on the subject of raising the retirement age:

> "The unanswered questions are (1) whether the individual and institutional changes necessary to employ elderly persons would be made; (2) whether undue hardship for many people would be a consequence; and (3) whether it is proper for government to create conditions compelling people to continue working longer."[14]

Revising the Formula for Indexing Benefits

Beginning in 1975, social security benefits have been adjusted automatically each year to reflect increases in the cost of living as measured by the CPI (Consumer Price Index). Based on increases in the CPI from the first quarter of the preceding year to the first quarter of the current year, each June from 1975 through 1982 social security benefits rose at an average annual rate of 8.7 percent. (The average for that eight-year period embraces a broad range of yearly cost-of-living rises—from 5.9 percent in June, 1977, to 14.3 percent in June, 1980.) Since total OASDI benefits averaged some $109 billion annually over that eight-year period, the annual automatic indexing has increased expenditures by an average of $9.4 billion a year, or approximately a $1 billion increase in benefit outlays for each 1 percent rise in the CPI.[15]

Among the recommendations for reducing the annual automatic benefit increases are: (1) index the benefits to reflect rises in average annual earnings in those years when increases in prices outstrip increases in earnings. In most of the 20th century, annual gains in wages outpaced rises in prices. However, since 1974, that relationship has not obtained—annual increases in the CPI have exceeded average annual wage increases in five out of eight years; (2) develop a special index for the elderly, which would more accurately measure the changes in the prices of goods and services that they buy—use this index if it would yield significant savings;[16] (3) extend the date for automatic cost-of-living increase by three months—from June of each year (payable in July) to September (payable in October); (4) raise benefits by a rate 3 percentage points less than the increase in the CPI. For example, if the CPI rises by 9 percent, the benefits would be raised by 6 percent; or the annual adjustment could be limited to a specified proportion of the CPI rise—75 or 85 percent are figures that have been suggested; (5) place a cap on the CPI increase—instead of adjusting benefits annually to the full extent of the rise in the CPI, the annual adjustment would be capped at a specified percent. If, for example, there were a cap of 5 percent on the cost-of-living increase and the CPI rose by 6 percent or more, benefits would be raised only 5 percent.

Proponents of amending the current practice of indexing benefits to the full extent of the increases in the CPI focus on these arguments:

(1) Since sharp rises in cost of home purchases and in mortgage interest rates in the past several years have played a major role in pushing up the CPI, the latter has overstated the actual rise in prices paid by older persons.

(2) It is not equitable for the nonworking population to receive benefits that rise at a faster rate than the earnings of workers who are paying for those benefits. *As mentioned above, the CPI registered greater gains than did average wages in five out of the eight years from 1974 through 1981. In those five years, the excess of the annual increase in the CPI over the annual increase in average wages ranged from less than 2 percentage points to nearly 5 percentage points. The theoretical savings that would have been possible, had benefits been indexed to the increases in wages during those five years instead of the CPI, would have averaged close to $3 billion annually. (Congressional Budget Office estimates of savings in social security outlays that would be achieved in fiscal years 1983 through 1985 under several different types of cost-of-living adjustments appear in Table 5.)*

But others do not see that any change in the way benefits are indexed is necessary. They argue that:

(1) The CPI does not overstate the cost of living of the elderly—overstatement of housing costs are more than counterbalanced by the sharp rises in medical and fuel costs. These two items account for a larger share of the expenditures of the elderly than of the younger segment of the population.

(2) Any cutback in automatic increases in benefits linked to the CPI would result in hardship for a substantial number of people who rely entirely, or almost entirely, on social security benefits.

Mandating Universal Social Security Coverage

Several of the study groups have recommended mandatory social security coverage for those segments of

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[14] Stanford G. Ross, *New Directions in Social Security: Considerations for the 1980's.* Washington, D.C.; U.S. Department of Health, Education, and Welfare, Social Security Administration, 1980, p. 40.

[15] Total benefits include amounts going to retired and disabled workers, their dependents, and survivors of disabled and deceased workers.

[16] A special consumer price index for the elderly is still relatively uncommon. Among the few countries that have such an index are the United Kingdom and the Federal Republic of Germany. For details, see J. Frank Gaston, *Adjusting Executive Pay for Inflation: A Technical Exploration.* The Conference Board, Report No. 819, pp. 23-27.

Table 5: Social Security Outlay Savings under Different Cost-of-Living Adjustments (COLA)
(by fiscal year, in billions of dollars)

	1983	1984	1985	Total 1983-1985
Eliminate 1983 COLA	2.2	9.2	9.5	20.9
Delay COLA's from July to October	2.2	2.1	2.8	7.1
Cap COLA's at 4 percent	0.6	2.7	4.4	7.7
Set COLA's at Growth in Wages Minus 1.5 Percentage Points[1]	0.2	0.9	0.9	2.0

[1] This option would result in small savings in outlays in the short run because of projected low productivity growth. Over the longer run, however, outlays could be either higher or lower than under current law, depending upon the relative behavior of wages and prices.

Source: Congressional Budget Office, cited by Alice M. Rivlin (Director, Congressional Budget Office) in her Statement before the National Commission on Social Security Reform, August 20, 1982.

workers that are not covered now, with the exception of certain groups that choose not to participate for religious reasons. The one-tenth of the work force that is not covered is largely made up of Federal Government employees, some state and local government employees, and employees of some nonprofit organizations.[17]

Many of its supporters have proposed, as an alternative, that current noncovered workers could be excluded from social security participation. Mandatory coverage would apply only to new employees—those hired after a specified date—of government and private organizations that had not been participating in the social security program. An additional recommendation is the repeal of the option permitting state and local government agencies and nonprofit organizations to withdraw from the program.

The principal points made by those in favor of universal social security coverage are:

(1) Universal social security coverage would be more equitable.

(a) It would eliminate windfall benefits which now accrue to federal workers who have spent a brief, but long enough, time in private employment to be eligible for social security benefits which are disproportionately large vis a vis their payments into the system. As noted earlier, the explanation for this phenomenon is that benefits are weighted in favor of workers with low lifetime earnings in order to provide them with a level of benefits that would be minimally adequate. If benefits were not skewed to their advantage, many more of them would require supplemental security income or other public assistance.

(b) Since it is mandatory for employees in private industry to participate in the social security program regardless of whether they have private plan coverage, it should be mandatory for government employees as well. In view of the income transfer concept implicit in the social security system, it is not defensible that a segment of the labor force be excluded from coverage.

(2) Workers in noncovered employment often suffer gaps in benefits protection. Noncovered workers may be without disability insurance during the first several years of their employment. The minimum length of service required by most pension plans is considerably longer than the 18 months of covered employment necessary for social security disability protection. Also, social security provides more generous benefits for dependents than most noncovered plans.

(3) People who have moved back and forth from covered to noncovered employment may receive combined retirement benefits from social security and pensions from noncovered employment which are less than if they had worked under one system only.

(4) Social security benefits are adjusted for price increases. While pension benefits of those retired from federal employment are also fully indexed to the CPI, benefits under most noncovered plans are not.

(5) Social security protection carries over from one employer to another. Portability of coverage is a singular advantage of social security; it does not exist outside the system. *While vesting increases the chances that a worker participating in a private pension plan will receive benefits during retirement, it certainly does not offer the degree of protection that exists in a fully portable system. Even among workers who are covered by a private plan, many lose their pension rights because they leave the job—and, therefore, the plan—before their benefits have become vested. Others may choose lump-sum benefits when leaving employment where they had vested pension rights.*

(6) More money would flow into the social security system. If all noncovered workers were brought into the system, receipts would substantially exceed outlays in the short run and more moderately in the longer run. If coverage were extended only to employees hired after a specified date, the net gains would be more modest.

Those who oppose universal social security coverage—mainly employees of the Federal Government—claim:

(1) Extending coverage to only new employees of noncovered segments would add relatively little additional income to the social security program in the short

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[17] Noncovered employees: all in Federal Government; about one-fourth in state and local government; and about one-tenth in nonprofit institutions. Very low paid or intermittent workers, such as some domestics and farm workers, constitute a very small percentage of those who are not covered by social security because their wages are below the minimum levels required for participation in the system.

Table 6: Annual Maximum Taxable Earnings and OASDI Contribution Rates

		OASDI Contribution rates (percent of taxable earnings)	
Calendar years	*Annual maximum taxable earnings*	*Employees and employers, each*	*Self-employed*
1937-49	$3,000	1.000	—
1950	3,000	1.500	—
1951-53	3,600	1.500	2,250
1954	3,600	2.000	3.000
1955-56	4,200	2.000	3.000
1957-58	4,200	2.250	3.375
1959	4,800	2.500	3.750
1960-61	4,800	3.000	4.500
1962	4,800	3.125	4.700
1963-65	4.800	3.625	5.400
1966	6,600	3.850	5.800
1967	6,600	3.900	5.900
1968	7,800	3.800	5.800
1969	7,800	4.200	6.300
1970	7,800	4.200	6.300
1971	7,800	4.600	6.900
1972	9,000	4.600	6.900
1973	10,800	4.850	7.000
1974	13,200	4.950	7.000
1975	14,100	4.950	7.000
1976	15,300	4.950	7.000
1977	16,500	4.950	7.000
1978	17,700	5.050	7.100
1979	22,900	5.080	7.500
1980	25,900	5.080	7.500
1981	29,700	5.350	8.000
1982	32,400	5.400	8.500
Changes scheduled in present law:			
1983-84	(1)	5.400	8.050
1985-89	(1)	5.700	8.550
1990 and later	(1)	6.200	9.300

[1] Subject to automatic increase.

Source: *1982 Annual Report of Trustees of the OASDI Trust Funds*, Table 1, p. 11.

run. *Estimates of the Social Security Administration indicate that significant additional income would be generated after three or four years.*

(2) Noncovered public employees are strongly opposed to mandatory social security coverage. They point out that substantial numbers of them have earned eligibility for social security benefits through some covered employment in the past. They feel that payments into the social security system would not yield them proportionately greater benefits.

Using General Revenues to Finance Medicare

Several study groups have recommended that part or all of medicare benefits be paid from general revenues. The 1979 Advisory Council on Social Security recommended that all of medicare be financed through earmarked personal income taxes, while The National Commission on Social Security recommended that one half of medicare costs be derived from general revenues—through a 2.5 percent surcharge on federal personal income taxes. The Advisory Council further suggested that part of the medicare tax rate be shifted to the OASDI program and the remainder be repealed.

Those who favor using general revenues to finance medicare point out that:

(1) It would reduce the overall payroll tax rate.

(2) Since benefits received from medicare are not related to prior earnings, and all who are eligible receive

the same protection, there is no need to derive these funds from a payroll tax. (OASI and DI benefits are related to the level of past earnings.)

(3) If the payroll tax were lowered, labor costs would be reduced.

(4) Use of general revenues would tend to benefit low-income workers more than higher income workers.

The two chief arguments against the use of general revenues to pay for part of medicare are:

(1) Workers who are not covered by social security would be contributing to the program.

(2) If general revenues were used, there would be less concern about hospital cost containment.

As far back as 1935, the year that the social security system was established, the likelihood of having to resort to general revenues to help finance the program was pointed out by some students of the subject. In a report to the President in 1935, the Committee on Economic Security projected that benefits would exceed receipts from payroll taxes by 1965.[11]

Taxing Social Security Benefits

Social security benefits are currently tax-exempt. Recommendations for taxing benefits have generally specified that only half of the benefits be subject to income taxes. The rationale is that one-half of the contributions to the social security system (the employee's contribution) has been taxed already while the other half (the employer's) has not.

The advantages of taxing social security benefits, according to its advocates, are:

(1) It would only affect persons with higher incomes, while those with low incomes would have to pay little or no tax.

(2) If the income taxes paid on social security benefits reverted to the OASDI trust funds, it would inject much needed additional revenue into the system.

The main point that is made by those who reject the idea of taxing benefits is that:

(1) Taxing benefits is equivalent to reducing benefits, and a substantial portion of persons affected will be those whose income is already somewhat marginal.

Raising the Payroll Tax

Another recommendation to restore the system's fiscal soundness is to increase receipts by raising the social security payroll tax. This can be accomplished by either increasing the payroll tax rate beyond scheduled levels or by taxing all earnings by eliminating the ceiling on earnings that are subject to the payroll tax. (Schedule of maximum taxable earnings and contribution rates appears in Table 6.)

Those in favor of this route as a means of bringing more money into the system claim that raising the OASDI tax rate by 1 percentage point, or thereabouts, is quite feasible. Surveys have shown that the majority of workers would prefer to pay higher payroll taxes rather than to have benefits reduced or have the age of eligibility for benefits raised.

The major argument against such an alternative is that social security taxes are already very high.

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[11] Joseph A. Pechman, Henry J. Aaron, Michael K. Taussig, *Social Security: Perspectives for Reform.* Washington, D.C.: The Brookings Institution, 1968, p. 195.

Attitudes of Workers and Retirees toward Social Security

SEVERAL SURVEYS have been conducted in recent years to determine the public's attitudes—especially workers' attitudes—toward retirement, pensions and social security. Below are some of the highlights of three such surveys, with the main emphasis on respondents' comments on social security.

A Nationwide Survey of Attitudes Toward Social Security was prepared by Peter D. Hart Research Associates for the National Commission on Social Security. This report presents the findings of a survey—conducted in November, 1979—of a randomly selected sample of 1,549 Americans aged 18 years and over. Of the total sample, 72 percent were nonretired persons and 28 percent were retirees.[19] Some of the findings are:

Slightly more than half of the respondents said that they found the idea of early retirement (before or around age 60) appealing—either "very appealing" (34 percent) or "quite appealing" (18 percent). A positive attitude toward early retirement was more common among nonretirees (58 percent of whom found it appealing) than among retirees (34 percent). Persons whose annual family income was above $17,500 (in 1978) and persons covered by pensions were also more likely to have favorable attitudes toward early retirement. While the proportion that views early retirement as appealing is greatest for blue-collar workers (62 percent), it is also high for professionals and executives (56 percent), as well as for other white-collar workers (51 percent).

Preference for early retirement, arrayed by age, reveals what some may regard as an unexpected finding: The 35 to 44 age group had the largest proportion of respondents who viewed early retirement as appealing (67 percent: 46 percent said "very appealing" and 21 percent said "quite appealing"). In contrast, the 65-and-over age group had the smallest proportion (29 percent: 18 percent regarded early retirement as "very appealing" and 11 percent regarded it as "quite appealing"). Since inadequate income is more common among those aged 65-plus, it can be assumed that they are more likely to be apprehensive about early retirement because of financial stress than the younger cohorts.[20]

In each of the other age groups, at least half of the respondents indicated that they found early retirement "very appealing" or "quite appealing" (Table 7). Moreover, for each of the four groups under 55, only about one out of seven respondents regarded early retirement as "very *un*appealing."

When respondents were asked at what age they would prefer to retire ("would have preferred," for those already retired), and at what age they expected to retire (or at what age they actually retired), the preferred age averaged 59 years and the expected or actual averaged 62 years. Moreover, the younger respondents (under 45 years of age) were more likely than the older ones to prefer to retire before age 60 (Table 8).

Assuming adequate retirement income, respondents were asked which of three given alternatives they would choose when they reached the "normal" retirement age of 65. Nearly half (48 percent) of the nonretired respondents replied that they would like to continue to work as long as they were able "at a less demanding or part-time job"; a substantial minority (31 percent) said that they would like to stop working entirely; and only 17 percent indicated that they would like to continue working full time as long as they were able to do so. (The remaining 4 percent were "not sure"). Hence, the great majority (79 percent) apparently wants a surcease from full-time employment when reaching 65. These findings suggest two policy implications: (1) the need for greater availability of part-time employment for older people, and (2) the need for providing options for older workers for making the transition to less stressful jobs. The latter may sometimes require retraining.

When respondents were asked which they would prefer if they had to choose between higher payroll taxes or lower social security retirement benefits, 63 percent said that they would choose higher taxes and only 15 percent said lower benefits. The remaining 22 percent said either a "combination of both" or "not sure."

Further, would they favor or oppose raising the eligibility age in 20 years—from 65 to 68 for full social security retired-worker benefits and from 62 and 65 for reduced benefits—if the alternative to raising the age were higher social security payroll taxes? While 36 percent favored raising the age, 51 percent opposed it, and 13 percent were not sure. Based on these responses, there appears to be stronger support for increasing taxes than for raising the age for eligibility for social security retired-worker benefits.

Another study, *Aging in the Eighties: America in Transition,* by Louis Harris and Associates, Inc., for The National Council on the Aging, is based on a survey, conducted in June and July of 1981, of a total sample of 3,452 persons aged 18 and over.[21] As in the Hart study,

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[19] Nonretired persons (72 percent of total): 50 percent were employed, 19 percent were housewives, and 3 percent were students; retirees (28 percent of total): 23 percent were retired persons, and 5 percent were members of households whose heads were retired.

[20] The report does not present an income breakdown for the 65-and-over group.

[21] The sample of 3,452 adults included a national cross section of persons 18 years old and over, plus four separate oversamples of persons aged 65 and over, 55 to 64, blacks and Hispanics.

Table 7: Appeal of Early Retirement

Age	Very Appealing	Quite Appealing	Not Very Appealing	Very Unappealing	Not Sure
			Percent Distribution		
18-24	35	23	21	13	8
25-34	35	20	23	15	7
35-44	46	21	15	14	4
45-54	40	17	24	15	4
55-64	31	19	28	19	3
65 and over	18	11	32	34	5
All respondents[1]	34	18	24	19	6
Nonretired	38	20	22	15	5
Retired	21	13	30	30	6

[1] Details do not add to 100 percent due to rounding.
Source: Peter D. Hart Research Associates, 1980, Table T12.

Table 8: Average Preferred Age of Retirement and Average Expected or Actual Age of Retirement

Age of Respondents	Average Preferred Age	Average Expected or Actual Age
18-24	57	61
25-34	56	61
35-44	57	61
45-54	60	61
55-64	62	61
65 and over	64	64
All respondents	59	62

Source: Peter D. Hart Research Associates, 1980, Table T10.

this survey also indicates that—as a means of restoring a better balance between expenditures and receipts in the social security system—the majority of the American people would be in favor of raising social security payroll taxes but disapprove of raising the age of eligibility for full social security benefits (Table 9 and Table 10, Item C). The respondents of all ages overwhelmingly disapproved of reducing retirement benefits—either for those already retired or for those who will retire in the future (Table 10, Items A and B).

Reducing cost-of-living adjustments for retirement benefits is evidently another unpopular option for restraining social security costs—nearly three-fourths of the people surveyed disapproved of such a recommendation (Table 10, Item E). However, when asked whether they approved or disapproved of basing the cost-of-living adjustment on increases in "*either* wages or prices, whichever is lower," more than half approved such a change (Table 10, Item I).

While the responses to those two questions may appear contradictory, perhaps they are not. Respondents may be conveying a strong sense of uneasiness about sanctioning cuts in the annual cost-of-living adjustments when the nature and size of such cuts are not specified. However, when there is the proviso that cost-of-living increases would be at least as large as the increases in average wages, the proposal seems less threatening to at least some of the respondents who reject the idea of outright reductions in the cost-of-living adjustments.

There also seems to be a high degree of approval for extending social security coverage to Federal Government employees (Table 10, Item G). Further, a majority of respondents approved the use of general revenues to pay part of social security costs (Table 10, Item F). Elimination of benefits for minor children of retired workers and limiting social security benefits to elderly people who can prove need are two recommendations that were turned down by more than 60 percent of the respondents (Table 10, Items D and H).

An earlier Harris study, *1979 Study of American Attitudes toward Pensions and Retirement*, presents the findings of a survey conducted by Louis Harris and Associates, Inc. for Johnson & Higgins, employee-benefits consultants. The sample of 1,699 persons was designed to be a national cross section of the civilian population aged 21 and over who, at the time of the survey (August, 1978), were either full-time employees (1,330) or had retired from full-time jobs (369).

In addition, 212 business leaders were interviewed. The leadership sample represented a cross section of 212 companies from the *Fortune* 1250 listing and the *Dun and Bradstreet Million Dollar Directory*. About one out of seven of these 212 respondents was the company's Chief Executive Officer, and the rest were executives designated by the CEO to represent the firm's views on pensions and retirement.

The proportion of those surveyed who regard retirement as a welcome life stage has apparently been

Table 9: Support for Raising Social Security Taxes

Q: Social security taxes should be raised if necessary to provide adequate income for older people.

Age	Base	Agree (Percent)	Disagree (Percent)	Not Sure (Percent)
18-24	223	51	40	8
25-39	509	46	43	11
40-54	362	48	42	10
55-64	489	54	36	10
65 and over	1,832	58	28	14
Total	3,440a	51	39	11

[a] Total exceeds sum of components by 25 respondents—those for whom information on age was lacking.

Note: Details may not add to 100 percent due to rounding.

Source: Louis Harris and Associates, 1981, Table V-3.

growing. In both this survey and one conducted by Harris four years earlier, employed persons were asked: "Do you personally look forward to retiring, or not?" The proportion who said that they were looking forward to retiring rose from 43 percent in 1974 to 54 percent in 1978 (Table 11). Evidently, the 32 percent rise in the CPI—which translates into a 24 percent drop in the purchasing power of the dollar—during that four-year interval had not made workers more apprehensive about their financial well-being during retirement.

The 1978 survey, which broke out the responses by age groups, showed that the oldest cohort (50 to 64 years old) had the highest proportion (63 percent) who were looking forward to retiring. Within that age group, a favorable attitude toward retirement was more common among those who were covered by pension plans. However, even among workers who were not covered, more than half were looking forward to retiring.

Also, self-employed persons are less likely to look forward to retirement than those employed by others (Table 11). Other surveys, such as the Parnes' National Longitudinal Study and the Social Security Administration's Retirement History Study, show that the self-employed, on average, retire later than employees. Among the explanations of this difference is that the self-employed have greater flexibility than those working for an employer in setting their schedules and the number of hours that they work.

Among retired respondents, 21 percent had left the labor force before age 55; at least 50 percent before 61; and 86 percent before 66. The median age at retirement was 60.6 years.

Popularity of Early Retirement Persists

Not only is there a widespread preference for early retirement, as shown by the findings of the Hart and

Table 10: Recommendations to Help the Social Security System

Respondents were asked whether they approve or disapprove of each of the following recommendations:

	Recommendation	Percent of Total
A[1]	Reduce Benefits for People Already Retired:	
	Approve	6
	Disapprove	92
	Not sure	9
B	Reduce Benefits Only for People Who Retire in the Future:	
	Approve	11
	Disapprove	85
	Not sure	4
C	Gradually Raise the Retirement Age for Full Social Security Benefits from 65 to 68 Years of Age:	
	Approve	35
	Disapprove	59
	Not sure	6
D	Eliminate Benefits for Minor Children of Retired Workers:	
	Approve	29
	Disapprove	62
	Not sure	9
E	Reduce the Cost-of-Living Adjustments in Retirement Benefits:	
	Approve	21
	Disapprove	73
	Not sure	6
F[1]	Use Federal Monies such as Income Taxes to Pay for Part of Social Security:	
	Approve	62
	Disapprove	30
	Not sure	9
G	Require Workers Who *Do Not Pay* Social Security Taxes Now—For Example, Employees of the Federal Government—To Pay These Taxes:	
	Approve	76
	Disapprove	18
	Not sure	6
H	Give Social Security Benefits Only to Elderly People Who Can Prove They Have Little or No Other Income:	
	Approve	32
	Disapprove	64
	Not sure	4
I	Base Cost-of-Living Adjustments on Increases in *Either* Wages or Prices, Whichever Is Lower:	
	Approve	56
	Disapprove	26
	Not sure	18

[1] Details do not add to 100 percent due to rounding.

Source: Louis Harris and Associates, 1981, Table V-4.

Table 11: Attitudes Toward Retiring

Q.: Do you personally look forward to retiring, or not?

	1978								1974
	Employment				Age				
(Number of respondents)	Total (1309)a	Hourly Wage Worker (534)	Salaried (584)b	Self-Employed (159)	18-24 (148)	25-34 (372)	35-49 (426)	50-64 (336)	Total Employees (1332)
	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent	Percent
Look forward to retiring	54	55	57	44	42	56	51	63	43
Don't look forward to it	40	38	38	52	47	40	42	33	51
Not sure	6	7	6	4	11	4	7	4	6

[a] The numbers in the three employment groups, as well as in the four age groups, total less than 1,309 because some respondents did not give complete information.

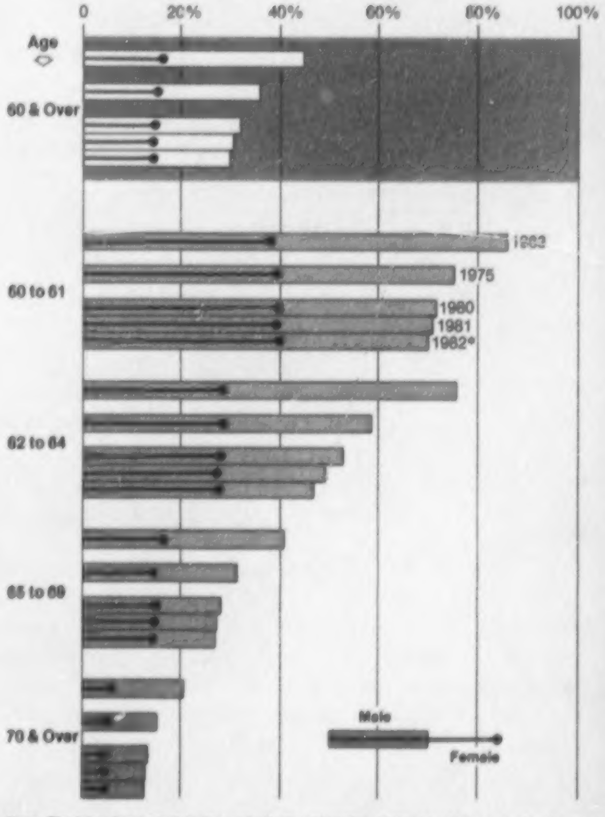
[b] Details do not add to 100 percent due to rounding.

Source: Louis Harris and Associates, 1979, Table II-3a.

Harris surveys, but increasingly workers are acting on this preference. A virtually steady decline in labor-force participation rates for persons 60 and over has been in evidence for at least two decades (Chart 2). This suggests that large numbers of people are eager to retire as soon as they are financially able to do so. As shown in at least one longitudinal survey, a substantial proportion of persons retire *voluntarily,* whether before 65, at 65, or later—without serious health problems and without being forced out through mandatory retirement plans.[22] Moreover, two-thirds of the voluntary retirements were early—occurring before age 65. Is the attractiveness of early withdrawal from the labor force an indication that large segments of the working population have unsatisfying jobs?

The early retirement trend has so far shown no marked inclination to weaken.[23] This may appear to many as somewhat anomalous considering the high levels of inflation that have prevailed for nearly a decade. While the rate of inflation has moderated in 1982, the Consumer Price Index had climbed steeply during the preceding eight years—between 1974 and 1981 it rose from the preceding year at an average rate exceeding 9 percent. And the rise in the CPI was especially sharp during 1979, 1980, and 1981. In each of those three years, the CPI rose at a double-digit annual rate. Since rising prices shrink the purchasing power of most forms of retirement income—an exception is indexed social

Chart 2: Labor Force Participation Rates of Men and Women Age 60 and over



Note: The labor force participation rate is the proportion of the population outside of institutions (prisons, mental institutions, sanitariums, or homes for the aged or infirm) that is in the labor force. For example, in 1981 the participation rate for men aged 70 and over was 12.5 percent which means that 12.5 percent of the men in that age group were either employed or looking for work.

* January to June average.

Source: Bureau of Labor Statistics, unpublished data.

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[22] Herbert S. Parnes and others, *Work and Retirement: A Longitudinal Study of Men.* Cambridge, Mass.: MIT Press, 1981, p. 190.

[23] For more detail on the factors that are apparently largely responsible for the phenomenon of early retirement, see Shirley H. Rhine, *Older Workers and Retirement.* The Conference Board, Report No. 738, 1978, pp. 28-33.

security benefits—the inflation rate certainly must be one of the considerations affecting the timing of the retirement decision. Evidently, for many people, inflation's contribution to the decision is overridden by a host of other considerations—attitude toward one's job, expected postretirement income and health are only a few of such considerations.[14] For a significant portion of persons about to retire, attractive early retirement benefits provided by many pension plans probably figure importantly in an assessment of income after retirement.

While a reversal in the trend toward early retirement may not be imminent, it could occur later in this decade when the absorption of the baby-boom generation into the labor market has been completed. The subsequent slowing in the growth of the work force may well retard—or even reverse—the trend toward early retirement.

When demand for labor is strong it is reasonable to expect that the practices of business, labor unions, and government may cease to encourage early retirement as a way of making more jobs and opportunities for advancement available to younger workers. Further, if the labor requirements of the economy expand faster than the labor supply, employers should become increasingly interested in providing older workers with incentives to remain at work, such as part-time work arrangements, flexible hours, and retraining when necessary.

In addition to restructuring jobs to make them more interesting and gratifying, perhaps there could be greater emphasis on better matching of people and jobs. How prevalent is the square-peg-in-the-round-hole syndrome? Are there substantial numbers of people who are unhappy with their occupations (and consequently underachieving) but who could be quite satisfied and more productive in another type of work? What kind of motivation would be required on the part of the employer and employee to extricate the latter from work that is uncongenial by seeking work—which may or may not require further formal education or training—that yields greater gratification?

Clearly, considerably more study of the workplace would be required to learn more about: (1) how jobs can be revitalized and made more satisfying; and (2) how young people preparing for the world of work and persons already in the labor force, but unhappy with their career choices, can be guided to choose occupations that are compatible with their skills, talents and temperaments. While such a service could benefit older workers, it could also have a salutary impact on many people at any point in the worklife continuum, or even before. Better direction in choosing an occupation should perhaps begin during the high school years when career choices usually, or at least frequently, are made. Doubtless, an environment where labor requirements are outstripping supply—a likely development by the late 1980's or early 1990's—could spark the implementation of imaginative management policies that encourage older workers to remain in the labor force longer.

The European Experience

CONCERN ABOUT mounting social security costs is not confined to the United States. It is also evident in the industralized countries of western Europe. Their social security systems also began to experience deficits in the mid-1970's, and for reasons similar to those of the United States.

High levels of inflation and rising unemployment served as the immediate catalyst. As in the United States, underlying these cyclical developments are more fundamental, secular influences—namely, aging populations, increased longevity, and a marked trend toward retirement at or before age 65, with declining proportions of people working beyond that age.[15] For example, from 1955 to 1980, the labor-force participation rate for the 65-plus population in Europe dropped from 16 percent to 8.5 percent.[16] These combined influences are mainly responsible for the rapidly growing costs of social security abroad as well as in the United States.

Higher Outlays for Social Security in Europe

Actually, the relative magnitude of social security costs is substantially greater in most of the industrialized western European nations than in the United States, as manifested by their considerably higher payroll tax rates for OASDI (based on U.S. definition). In 1981, for example, the OASDI tax rate for employers and employees combined was 10.7 percent in the United States.

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[14] For a brief discussion of the retirement decision, see Shirley H. Rhine, *America's Aging Population: Issues Facing Business and Society*. The Conference Board Report No. 785, 1980, pp. 30-34.

[15] A population is said to be aging when the number of persons in the older age groups, for example, 65 and over, is expanding at a faster rate than the rest of the population. The main contributors to such a trend are low birth rates since the mid-1960's, relatively high birth rates in the late 19th century and early 20th century (when persons aged 65-plus today were born), and increased longevity.

[16] Max Horlick, *Social Security in Europe: The Impact of an Aging Population*, An Information Paper prepared for use by the Special Committee on Aging, United States Senate. Washington, D.C.: Government Printing Office, 1981, p. 17.

It ranges upward of 13 percent for all the other countries, with the exception of Switzerland (Table 12).

The Netherlands has the highest payroll tax--34.9 percent in 1981. A major reason for this inordinately high rate compared with other European countries, as well as with the United States, may be their exceptionally generous disability program. Also, workers' compensation insurance is included in the Netherlands disability insurance. The general revenue contribution to OASDI, in addition, is relatively much smaller in the Netherlands than in other European countries.

Since most of the industrialized countries of western Europe rely on significant amounts of general revenues, their OASDI is even costlier than indicated by their payroll tax rates. In some countries, payroll taxes supply less than 80 percent of the outlays for OASDI benefits, with the remainder coming from general revenues (Table 13). In Austria, for example, some 35 percent of the expenditures for benefits are derived from general revenues. And general revenues account for close to a fourth of the outlays for OASDI benefits in Belgium and the Federal Republic of Germany.

Table 12: Payroll Tax Rates for Social Security (OASDI) in 1981, Selected Countries

Country	*Employers*	*Employees*	*Total*
	(as percent of payroll)		
Austria	11.35	9.75	21.10
Belgium	8.86	6.25	15.11a
France	8.20	4.80	13.00b
Germany, Federal Republic of	9.25	9.25	18.50
Italy	17.31	7.15	24.46
Netherlands	12.90	22.00	34.90c
Sweden	21.15	—	21.15
Switzerland	4.70	4.70	9.40
United States	5.35	5.35	10.70

[a] Disability benefits financed through sickness insurance.
[b] Disability and survivors' benefits financed through sickness insurance.
[c] Disability insurance also includes workers' compensation.
Note: Data not available for the United Kingdom.

Source: Comparative studies staff, Office of International Policy, Office of Policy, Social Security Administration. Cited in *Social Security in Europe: The Impact of An Aging Population*, an information paper prepared by Max Horlick for use by the Special Committee on Aging, United States Senate, December, 1981, p. 13.

Table 13: General Revenue Contributions to OASDI as a Percentage of Expenditures on OASDI Benefits, Selected Countries, 1957-1977

Country	*1957*	*1960*	*1963*	*1966*	*1971*	*1974*	*1977b*
Austria	15.9	20.3	28.3	32.0	29.4	30.0	34.8
Belgium	34.0	33.1	30.4	27.3	19.7	21.5	23.4
France	n.a.	8.4	7.6	6.0	n.a.	14.1	9.7
Germany, Federal Republic of	37.8	33.8	32.8	32.0	25.3	25.1	24.2
Netherlands	10.4	8.3	5.4	8.5	4.9	3.9	7.8
Sweden	62.3	43.9	53.1	61.1	50.6	49.4	18.82
Switzerland	17.3	14.0	14.7	19.4	20.2	18.8	14.76
United States	a	a	a	a	a	a	.8

[a] Negligible.
[b] Latest available data.
n.a. Not available
Note: Data not available for the United Kingdom.

Source: International Labour Office, *Cost of Social Security*, cited in *Social Security in Europe: The Impact of an Aging Population*, 1981, p. 13.

In the United States, the OASDI program is financed virtually entirely from payroll taxes paid by employers and employees and taxes on earnings from self-employment up to a specified ceiling. Only a nominal proportion is supplied from general revenues.[27] However, as mentioned earlier, the use of general revenues to pay part or all of the hospital insurance (medicare) portion of social security has been recommended by several groups.

Another set of data that demonstrates the relative magnitude of OASDI benefit payments in the economies of industrial countries of western Europe compared with the United States is the proportion of GNP (gross national product) accounted for by such payments. In 1977, expenditures on OASDI benefits was 4.3 percent of GNP in the United States, as against a range of 6.0 percent to 10.2 percent in the European nations (Table 14 on page 22).

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[27] General revenues are used to pay for monthly benefits for persons with less than three-quarters of coverage. (They are also used to cover the cost of hospital benefits for individuals not entitled to social security benefits and the cost of supplementary medical insurance not covered by the premiums of those enrolled in the Supplementary Medical Insurance program.)

Table 14: Expenditures on OASDI Benefits (U.S. Definition) as a Percentage of Gross National Product, Selected Countries, 1957-1977[1]

Country	1957	1960	1963	1966	1971	1974	1977a
Austria	4.0	5.0	5.3	6.0	7.0	7.0	8.0
Belgium[2]	3.0	3.1	4.0	4.0	4.2	5.1	6.0
France[2]	3.0	2.2	3.0	3.2	n.a.	5.1	6.2
Germany, Federal Republic of	6.0	6.0	6.0	6.2	6.4	7.4	9.0
Netherlands	3.0	4.0	5.0	6.3	7.4	8.3	10.2
Sweden	3.4	3.3	4.0	5.0	6.0	7.1	9.2
Switzerland	2.0	2.2	2.3	3.0	4.0	5.3	7.1
United Kingdom[3]	4.0	3.2	4.0	4.0	4.0	5.0	6.0
United States[3]	1.5	2.2	2.6	3.4	3.4	4.0	4.3

[1] These statistics are based on data provided by the International Labor Office, adjusted to include cash OASDI benefits. Gross national product figures of the International Monetary Fund were used.

[2] Disability insurance is administered together with sickness insurance and is not included.

[3] Adjusted to fiscal year.

n.a.—Not available.

[a] Latest available data.

Source: International Labour Office, *Cost of Social Security*, cited in *Social Security in Europe: The Impact of an Aging Population*, 1981, p. 7.

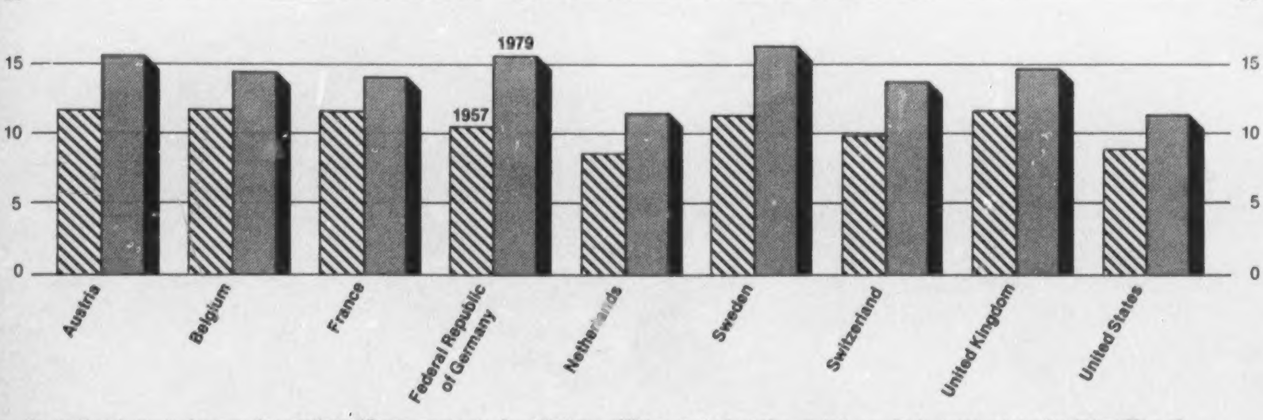
Higher Proportion of Elderly in Europe

The primary reason for higher costs for OASDI among the European countries is that their populations have been aging more rapidly, reflecting mainly lower birth rates, than in the United States during the past three decades. By 1979, a little over 11 percent of the U.S. population was at least 65 years old, considerably below the ratios in the major countries of western Europe (Chart 3). Japan and Canada are the only industrially advanced countries in the world where the number of persons 65-plus represents a smaller proportion of the population than in the United States.

In many of the industrial countries of Europe, OASDI benefits are subject to income taxation when the recipient's total income is greater than a specified amount. Social security benefits in the United States are not taxable. However, one of the recommendations for bringing more money into the U.S. system, as mentioned above, is to treat half of social security benefits as taxable income and channel the resultant revenues into the OASDI trust funds.

The relatively higher payroll taxes paid by workers in most of the more advanced western European countries is explained mainly by two phenomena: (1) A larger proportion of their populations is receiving retired-

Chart 3: Population 65 Years Old and Over as a Percentage of Total Population, 1957 and 1979— Selected European Countries and the United States



Source: Organization for Economic Co-operation and Development, *Labor Force Statistics*. 1957 data cited in *Social Security in Europe: The Impact of an Aging Population*, 1981, p. 16; 1979 data OECD, *Labor Force Statistics*, 1968-79 edition (Paris 1981).

worker benefits and; (2) Disability benefits tend to be more generous in Europe than in the United States. Not nearly as important as the other two, but nevertheless a contributing factor, is that income replacement rates are somewhat higher in many of those countries compared to the United States. It is clear that financing the OASDI programs of other advanced economies places a considerably greater burden on their working populations than in the United States.

In their Preface to the Horlick study, *Social Security in Europe: The Impact of an Aging Population,* Senators John Heinz (Chairman of the Special Committee on Aging) and Lawton Chiles (Ranking Minority Member), say about the European programs: ". . .We are struck. . .with the durability of these social insurance programs. They have survived two world wars, ravaging inflation, and political and economic collapse. There is every reason to expect that the American social security system will display the same resilience, the same ability to guarantee economic security to all those who depend on it, in both good times and bad times, if we commit ourselves to the goals it deserves."

Conclusion

THE CONCLUSION of virtually all of the groups that have studied the social security system is that it is distinctly viable. (See box for two sample comments.) Despite serious financial problems—both for the short term and the long term—workable remedies are clearly available.

The task before Congress is to act on reforms only after all of their ramifications have been thoroughly explored—at least all the foreseeable ones. Legislation that comes into being without rigorous analysis may bring forth unintended consequences that sabotage its basic aim or aims.

". . .the question for the system *is not one* of whether the system can be restored to sound financial condition, but how it will be done. The policy options are abundant—but those around which a political consensus can be reached are more limited. The urgency of the situation, however, may diminish ideological differences."[28]

It is axiomatic that restoring and maintaining the fiscal health of the social security system are more easily accomplished when the economy is robust than when it is sluggish. Continued moderation in inflation, a significant reduction in unemployment rates, and more vigorous growth in productivity would constitute important contributions toward the elimination of social security deficits.

Summary Comments of Two Study Groups

After studying a variety of alternatives, the National Commission on Social Security concluded that the social security system is the best method for providing income support in the United States. "Of all sources of retirement, disability, or survivorship income, Social Security has the best potential for stable real income, especially in times of economic adversity. Social Security provides a combination of features that, as a package, are not matched by private pensions or annuity plans: early vesting, automatic indexing to inflation, portability of earnings credits from job to job, benefits to family members, and exemption from taxes."[1]

All of the major alternatives to social security that were scrutinized by the Commission were found to be "either too costly or offer insufficient assurance that income will be there when workers need it." Other alternatives were regarded as too limited in either coverage or benefits. Moreover, it was deemed that, for all the alternatives, there would be great difficulty in devising a workable transition from the current system. "The Commission believes that the transition financing problem is a significant barrier to the success of any substitute program."

* * * * *

From the 1979 Advisory Council on Social Security:

"The council is unanimous in finding the social security system is the government's most successful social program. It provides basic retirement, disability, and survivorship protection which American workers can supplement with their own savings and private pensions, and it will continue to provide this protection for as far ahead as anyone can see.

"After reviewing the evidence, the council is unanimously convinced that all current and future social security beneficiaries can count on receiving all the benefits to which they are entitled."[2]

[1] National Commission on Social Security, *Social Security in America's Future.* Washington, D.C., March, 1981, p. 4.

[2] *Social Security Financing and Benefits,* Report of the 1979 Advisory Council on Social Security, p. 1.

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[28] David Koitz, *Social Security Financing and Taxation,* Issue Brief Number IB80007, The Library of Congress, Congressional Research Service, Washington. D.C., September 11, 1981, p. 24.

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Urban Plant Siting

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Introduction

For nearly three decades U.S. cities have been undergoing profound changes that have altered both the social and economic landscape of urban centers. Unfortunately, many of the changes have not been improvements. While some cities were growing in population, others were shrinking (Table 1). In some cities, a migration by the middle class from urban jobs and residences to suburban—and even exurban—housing and employment opportunities has left a population that is poorer, less skilled, and more in need of municipal services. At the same time, the tax base that would support such services has continually eroded.

The Effect of Job Loss

Earlier in the century, central-city locations had been ideal sites for new businesses. Many of these locations, however, are no longer as competitive and attractive as they were prior to World War II. Urban disadvantages, such as congestion and the obsolescence of some multistory buildings, now often outweigh the advantages. Also, changes in transportation and communication have increased the choices available in location decisions.

There seems little doubt that the transfer of jobs, particularly in manufacturing, from urban to suburban or rural locations has been a major contributor to the plethora of problems faced by urban centers. The job loss has been most evident and dramatic in many of the older industrial cities of the Northeast and North Central regions of the country, with a variety of factors cited as being responsible.

In some instances, the jobs simply "commuted" to areas adjacent to, but outside of, the cities' political boundries. Companies headquartered in New York City, for example, moved to nearby Connecticut, Westchester County, or suburban New Jersey. The same phenomenon occurred in the Chicago metropolitan area and, to a lesser extent, in some smaller cities.

In other instances, the jobs "went South." Many companies establishing new or expanded manufacturing or service facilities chose Sun Belt locations for these new facilities, and many cities in the South and Southwest experienced a rapid growth. Both companies and individuals voted with their money and their feet and moved to the Sun Belt.

And, many firms have chosen to disinvest in urban-based manufacturing and service facilities in favor of suburban or rural locations. Companies can accomplish this in many ways that are difficult for economists and regional planners to evaluate empirically—shifting personnel and production resources from one plant to another, for example.

Meanwhile, those companies that were located in many of the older cities of the North and Midwest were disproportionately made up of firms in slow-growth industries—for example, machinery, leather goods, garment production. By contrast, many of the more rapidly growing cities in the South and West had more firms in such rapid-growth industries as electronics and computer components.

On a regional basis, the data look somewhat different,

Table 1: Population Changes in Selected Cities

Growing Cities	*Percent change 1970-1980*	*Declining Cities*	*Percent change 1970-1980*
San Jose, Cal.	+38%	St. Louis, Mo.	—27%
Phoenix, Ariz.	+35	Cleveland, Ohio	—24
Charlotte, N.C.	+30	Buffalo, N.Y.	—23
Orlando, Fla.	+30	Detroit, Mich.	—21
Houston, Texas	+29	Newark, N.J.	—14

Sources: U.S. Bureau of the Census, *1980 Census of Population*, Advance Reports by State, Series PHC80-V.

SURVEY TECHNIQUE

Approximately two years ago, The Conference Board developed a computerized data base that records the construction of any new manufacturing facility within the continental United States with aggregate construction costs in excess of $250,000. This data base also lists major expansions or remodelings of a similar cost.

The data base permits Conference Board researchers to identify where new plants have located by zip code, SIC code, and number of employees, among other factors. This data base was used to select all of those new manufacturing plants that had been constructed in zip codes assigned to major urban centers throughout the United States. Several hundred such plant locations were identified in 24 states.

A questionnaire was mailed to the headquarters location of each new manufacturing facility, in order to develop data on the location and construction of the new plant facilities. Sixty-eight companies responded. These primary research data were reenforced by a review of the literature on the topic.

Characteristics of the Firms Studied

The respondents include 16 manufacturers of nondurable goods and 52 manufacturers of durable goods. The major product categories represented are: electrical and nonelectrical machinery (including computers and electronics), primary and fabricated metal, and transportation equipment.

A wide range of companies, as measured by sales, assets and number of employees in the United States, is represented (see Tables 2, 3, and 4). They are geographically dispersed by region. As another measure of size, more than three-fifths of the companies have three or more manufacturing facilities and about one-fifth have twenty-five or more.

To be included in this survey, each company had to have at least *one* urban manufacturing facility. One-third of the respondents indicate that they have only one plant in a city, almost one-third indicate that they have four or more plants in cities; and the rest have two or three.

Table 2: Responding Companies, by Sales

Total Sales, 1980 (millions of dollars)	*Percent of 68 Companies*
Up to $10	26%
$11-$50	22
$51-$1,000	18
$1,001 and over	21
No answer[1]	13
	100%

[1]Includes privately held companies and new companies with no sales records as yet.

as discussed in a recent Conference Board publication.[1] New England, for instance, has a diverse economy, and there, "the aging and decline of long-standing industries is balanced by the emergence and growth of new ones. It is the process of regeneration which makes the New England economy viable." Although the region has been hurt by the current recession, "the outlook for New England is more bright than bleak." However, as this analysis points out, "shoe and textile companies still close in New England, and when they do, they leave an older and largely immobile work force with few immediate opportunities."

Although manufacturing employment is still declining in most central cities, in some it is being replaced with service jobs, and the cities are remaining vital and dynamic. In these cities, the physical structure is also changing as office buildings replace factories and old industrial buildings are converted into downtown housing.

The Problem of Small-Business Job Losses

Small-business formations and the operation of small business have a dramatic impact on employment, particularly in urban centers. An MIT study by David Birch found that small companies (with 20 or fewer employees) generated two-thirds of all new jobs in the United States between 1969 and 1976. And four-fifths of all new net gains in employment are due to the hiring practices of firms with 100 or fewer employees.[2]

On the other hand, a recent study by The Brookings Institution found that small independent businesses with 100 or fewer employees accounted for only 37 percent of employment growth between 1978 and 1980. The difference between the two studies is accounted for, in part, by the fact that branches or subsidiaries in the Brookings data are not counted separately from enterprises (firms). The policy conclusions are very similar to those of the MIT study: Large new branches of major firms are not likely to be the significant source of new jobs in a particular community. Small businesses, however, are usually tied to a local community—both economically and socially. They are more responsive to local conditions and are less likely to relocate to other communities.

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[1] Lora Collins, *U.S. Regional Outlook 1982-1983*. The Conference Board, Research Bulletin No. 118, 1982, pp. 7-8.

[2] David L. Birch, *The Job Generation Process* (summary). Cambridge, Mass.: M.I.T. Program on Neighborhood and Regional Change, 1979, p. 8.

Table 3: Responding Companies, by Asset Size

Assets, 1980 (millions of dollars)	*Percent of 50 Companies*
Up to $3,999	24%
$4,000-$34,999	26
$35,000-649,000	24
$650,000 and over	26

Median: $26,050,000
Range: $500,000 to $20,000,000,000

And, because small businesses tend to start up or expand when there is less competition, they are often a stabilizing influence in a weakening local economy or industry.[3]

The formation of new, small businesses—with the new jobs they create—is one of the most important stimuli to employment gains. In terms of net new jobs, their high failure rate is more than compensated for by their high start-up rate. Indeed, some of the healthiest local economies have a very high small-business failure rate. According to Birch, part of what makes these economies dynamic and healthy is that the *new* business-formation rate is so high.[4] Moreover, these small businesses are major employers of younger, unskilled workers, and their absence in some cities in recent years has contributed to skyrocketing unemployment rates among the young and the unskilled.

Breaking a Vicious Cycle

City administrators, faced with a declining tax base because of the middle-class exodus, building abandonment, out-migration of businesses, and so on, have typically responded to fiscal strain by trimming capital budgets and/or deferring needed maintenance programs. Too often, these cutbacks have seriously eroded the very infrastructures that helped make cities attractive as sites for business operations.

A growing realization of the inexorable linkage among jobs, new-business formations, and conditions conducive to maintaining employment in urban centers has focused the attention of both private- and public-sector policymakers on the factors influencing business to choose urban-center locations, as well as on the experience of companies that have located facilities at such sites. During the Winter of 1981-1982, The Conference Board sought to identify firms that had recently chosen to locate manufacturing facilities in urban centers. The purpose of this research was to pinpoint the primary factors in these firms' location decisions and to analyze the experience of companies that are operating new production facilities in urban centers.

National Urban Policy

While the United States may not have had a consistent national urban policy over the past decades, the actions of the Federal Government have had, and continue to have, a significant impact on the growth and decline of American cities. Several policies have had a negative impact on central cities, particularly the older industrial cities. Since the New Deal, for instance, the Federal Government has indirectly assisted the out-migration of population and jobs from central cities by encouraging the growth of suburbia and exurbia. Programs that led to the construction and improvement of the federal highway system, as well as mortgage policies that encouraged the construction of new suburban housing, were among the federal actions and policies contributing to the movement out of the cities.

The Federal Government has also, since World War II, sponsored several programs designed to deal specifically with urban decay. Each was predicated on a different concept of what causes urban decline. For example, the urban renewal policy of the 1950's and early 1960's was aimed at the physical symptoms—such as spreading slums and the difficulty of assembling large tracts of land.

The 1960's, with the war on poverty and the drive for civil rights, focused on relieving unemployment among inner-city, minority residents, particularly youth. The result was a wide variety of new programs including Manpower Development and Training and Model Cities.

The programs of the 1970's, particularly in the latter part of the decade, concentrated heavily on private-industry job creation. An early example was the 1974 Comprehensive Employment and Training Act (CETA),

Table 4: Number of Company Employees in the United States

Number of Employees	*Percent of Companies*
Up to 49	19%
50-249	21
250-1,149	19
1,150-14,999	19
15,000 and over	21
	100%[a]

Median: 415
Range: 14 - 129,764

[a] Details do not add to 100 percent because of rounding.

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[3] Catherine Armington and Marjorie Odle, *Sources of Recent Employment Growth 1978-1980.* Working Paper No. 5, Business Microdata Project, Economic Studies Program, Washington, D.C.: The Brookings Institution, 1982.

[4] David L. Birch, "Who Creates Jobs?" *The Public Interest,* Fall, 1981.

which included community-development block grants.

In a March, 1978, message to Congress, President Carter introduced his proposals for what he termed a "comprehensive national urban policy" representing a "long-term commitment to the nation's urban areas." This policy was based on a "New Partnership involving all levels of government, the private sector, and neighborhood and voluntary organizations in a major effort to make America's cities better places in which to live and work." It was evident that the limits of federal largesse were beginning to be understood. President Carter stated that the need for a partnership was based on the recognition that the "federal government alone has neither the resources nor the knowledge to solve all urban problems."[1]

The centerpiece of President Carter's urban policy was the Urban Development Action Grant (UDAG) program. This program, altered only slightly under the Reagan Administration, is designed to stimulate economic recovery in distressed urban communities by using public funds to encourage private-sector investment. What distinguishes this program from previous urban revitalization programs is that, for the first time, government funding for a project is dependent upon private-sector financial commitments. This requirement is designed to ensure active involvement of the business community. Government officials say that approximately $6 of private investments have been stimulated for every $1 of UDAG funds, and that several hundred thousand new jobs in the private sector have been created or retained by this program. The program is designed to be flexible, and the grants have been used for downtown commercial redevelopment projects, housing development, and industrial expansion. (The current administration has tried to emphasize the use of UDAG's for industrial facilities.)

Enterprise Zones

The centerpiece of President Reagan's urban program is the experimental concept of enterprise zones as a means of revitalizing economically depressed inner cities and rural areas. The Administration's bill, "The Enterprise Zone Tax Act of 1982," was introduced in the Senate on March 30, 1982, and in the House on March 31, 1982.

Although the concept has not generated widespread enthusiasm, neither has it generated tremendous opposition. Several mayors and governors are interested in the program as one more possible way to stimulate economic activity in depressed areas. Some of the criticisms and concerns that have been expressed include reservations about the effectiveness of the proposed tax incentives to attract new small businesses; objections that tax revenues would be lost to government; and fear that other urban programs will be discontinued (in addition to those that have already been dropped).

Enterprise zones are designed to stimulate private- sector job creation by providing a climate conducive to new business growth and formation. The enterprise zones program is unlike the federal urban revitalization programs of the 1950's and 1960's, which required centralized planning and heavy government subsidies. This new approach reflects the Federal Government's growing recognition that job creation is most successful when handled by the private sector. Indeed, a basic tenet of this approach is that government regulations and intervention often hinder job creation in central cities, and act as a barrier to entrepreneurial activity.

Basically, enterprise zones are intended to revitalize designated declining areas by attracting new—particularly small—businesses. Twenty-five zones a year would be established over three years. The zones would reduce the regulations and taxes that inhibit new business creation. The legislation also encourages state and local governments to provide improved local services and tax incentives.

Enterprise zones were first proposed in the late 1970's in Great Britain and were made part of that nation's economic plan in late 1980. The concept was introduced in the United States in 1979 by Stuart Butler of the Heritage Foundation, who suggested an adaptation of the British system. Congressmen Jack Kemp (R-N.Y.) and Robert Garcia (D-N.Y.) have been most closely identified with the legislation proposed in Congress over the last two years.

Several states are considering their own enterprise zones. Connecticut became the first to enact such legislation in July, 1981. Several other states (Florida, Indiana, Maryland, Louisiana, Ohio, Kentucky, Minnesota, Kansas, Missouri, Virginia and Arizona) are also implementing similar programs, and many more have enterprise-zone legislation awaiting final action.

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[1] President J.E. Carter, "National Urban Policy, Message to the Congress, March 27, 1978," *Weekly Compilation of Presidential Documents*, April 3, 1978, pp. 581-582.

The Decision to Establish or Relocate a Manufacturing Plant in a New Location

Site-location decisions are one of the most critical steps in a firm's capacity-planning process. A major analysis by Roger W. Schmenner, an authority on business- location decisions, points out that the broad elements comprising this process include: (1) the recognition of future capacity needs; (2) the creation of both short-term and long-term options for dealing with any recognized capacity needs; (3) the decision on whether a new site is needed and where, in general, it should be; and (4) the actual site selection.[6] This study focuses primarily on the latter two elements.

The Initial Decision

The decision about *whether* to establish a new facility is so important to a company's fortunes that almost two-thirds of the respondents indicate that it is initiated "mostly" by corporate-level executives rather than by group-, or division-level, executives. In almost all cases reported for this study, the decision is arrived at by several executives actively participating in the process. In nearly nine out of ten cases, three or more executives are involved in the initial decision.

Number of Executives	*Percent of 62 Respondents*
One	3%
Two	10
Three	24
Four	19
Five	13
Six	13
Seven to twenty	18
	100%

Site-Selection Decision Making

Over one-half of the companies report that site-selection decisions are usually the primary responsibility of one or more key executives; nearly a fifth report that this responsibility is shared by a key executive and a company unit or outside organization. In these cases, the firm's president is cited most frequently as the key decision maker.

Although about one out of four respondents report that an existing department within the company shares responsibility for site-selection decisions, only about one in ten says that such a department has the primary responsibility. The responsible departments mentioned most frequently by the respondents are real estate, facilities planning or development, and engineering.

Almost one-third of the companies say that a special task force or committee has some responsiblity for site-selection decisions, with about one-half of these task forces or committees having the primary reponsibility. Very few companies report that an outside organization has the major responsibility for the site-selection decision, and none of the companies studied assigns sole responsibility to them.

The importance of the *final* site decision is demonstrated by the fact that, in nine out of ten cases, it is made by a very senior-level executive. For example, two-thirds of the companies report that the decision is made by the president, chairman or the board of directors.

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[6] Roger W. Schmenner, *Location Decisions of Large, Multiplant Companies.* Cambridge, Mass.: Harvard-MIT Joint Center for Urban Studies, 1980, pp. 2-5.

Site Selection

Options for Expanding Capacity

Because plant location is one step in a company's capacity-planning process, it involves more than choosing a site. The steps in this process include consideration of: (1) the amount and quality of the company's present capacity; (2) the way in which existing plants fit together in a multiplant manufacturing strategy; and (3) expected capacity requirements. The site-selection decision usually comes at the end of this decision-making process.

If a company has forecast future capacity needs, and determined that it must expand production, it can add plant space in one of three ways—by expanding on-site, by relocating, or by establishing a new facility. On-site expansion is the most frequently used means of adding industrial capacity because of its low cost and minimal amount of disruption. In most cases, though, the long-term disadvantages of repeated on-site expansion—for example, delayed introduction of new technology, nonoptimal plant layout, management difficulties due to the increasing size and complexity of the operation—often lead to a decision to open a new facility or to relocate.

"Plant relocations," as one analysis points out, "are traumatic experiences for many managers and hence are likely to be avoided if at all possible. . . . Actual relocations occur at a rate of only 3 percent per year for manufacturing establishments of all sizes, and less than 1 percent per year for plants of at least 100 employees."[1] Of course, the cost of moving and disrupted production also often weigh against relocation. The establishment of new branch plants is a more common way of expanding capacity, especially among larger companies.

According to Roger Schmenner, five general types of multiplant manufacturing "strategies" can be identified in an analysis of new branch plants. Each one of these is based on specific cost or managerial considerations.

The five types are:

- product-plant strategy—each plant manufactures a distinct product or product line and serves the company's entire domestic market area;

- market-area plant strategy—each plant manufactures all or most of the company's product lines and serves a subnational market;

- product-market plant strategy—combines elements of both strategies;

- process-plant strategy—the production process is separated by plant, with several plants making the components of a complex product and shipping these components to an assembly plant;

- general-purpose plant strategy—these plants are flexible and can adapt to changing product needs.

In addition to expanded production or capacity needs, a company may also decide to relocate, expand or establish a new plant because of obsolescence or overcrowding of a particular plant; a shift in market location; unreasonably high overhead and production costs; and other similar reasons.

A significant finding from research on site selection is that most companies do not tend to locate their new branches primarily to take advantage of lower site costs. Rather, companies locate new plants, for the most part, on those sites that offer technological, managerial or other broad advantages. Long-term considerations are usually more important than short-term ones. Costs and benefits are evaluated, but the key factor is whether the location will allow the company to remain competitive for a long period of time.

Key Factors in Site Selection

The key factors considered in site selection address the particular demands of the industry, the manufacturing strategy of the company, and the function of the new plant. In its site-selection process, a company usually compiles a list of such key criteria. For some companies, there will be unique industry-specific requirements that are usually the major determinants, and other considerations will become secondary. In other cases, company-specific requirements are of primary importance.

Some considerations clearly dictate the geographic parameters of the search—for example, whether the new site must be in a particular region, state or metropolitan area. Canning and frozen-food companies, for instance, are usually tied to specific locations by the constraints of raw material availability. The nature of the manufacturing process may also limit the location choices—for example, space or structure requirements may necessitate a certain amount of land for horizontal layout and thereby eliminate inner-city locations where large enough tracts of land are not available. And environmental constraints may prohibit the location of certain industries with noxious emissions in densely populated areas.

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[1] Roger W. Schmenner, "Look Beyond the Obvious in Plant Location," *Harvard Business Review*, January-February, 1979, pp. 128-129.

Picking a Particular Site

In selecting plant locations, less than a third of the companies studied focus primarily on sites in a single city, and less than one-sixth restrict themselves to sites within one state. Instead, the majority of the respondents focus on a region. Other research confirms this finding. A 1977 *Fortune* survey of the largest industrial corporations, for instance, indicated that most of the large firms began their search for plant locations on a multistate level.[8]

Proximity to headquarters is not a critical consideration for almost one-half the respondents to this survey, although one-third say that it is "sometimes" important. Indeed, Schmenner found that, although the trend is not strong, plant openings are likely to occur at a distance from corporate headquarters. He also found that more plants of all types (e.g., "stay-put plants," "on-site expansions") are found around divisional rather than corporate headquarters.[9]

Three out of four respondents to The Conference Board's survey indicate that the number of sites accorded serious consideration before a final one is chosen falls into the range of three to five (about two-fifths of the companies seriously consider three sites). Table 5 lists, in order of frequency of mention, the sources that are generally used by companies to identify possible sites. Obviously, most companies generate their own information, although they frequently supplement it with suggestions from other organizations and individuals.

For the most part, the criteria for site selection have not changed drastically over the last several years, according to a majority of those questioned. Those who did report changes mention such factors as energy and utility service considerations; local community and government support or acceptance; changes in marketing and transportation considerations; and such labor considerations as costs, availability of skilled and unskilled labor, and union activity or militancy.

The ultimate determinants of plant location are still usually economic and operational ones; plants are located where costs can be minimized and long-term returns maximized. The traditional factors considered by a company are: (a) marketing (including access to customers and raw materials) and transportation; (2) financial (including general cost reduction, taxes, etc.); (3) labor; and (4) production or site (including energy resources). Quality of life and business climate have recently gained in significance as well, although their importance varies somewhat by industry. For example, many high-technology companies are concerned with the cultural and educational environment because their professional personnel demand such amenities.

Table 5: Sources of Information Used to Identify Possible Sites

Source	*Frequency of Mention*[1]
In-company research or surveys	81%
Real estate brokers or appraisers	65
State or local government development agencies	63
Local chambers of commerce	35
Personal recommendations	29
Visits by state or local government officials	25
Major property owners or developers	21
Public-private development groups	13
Private development groups	10
Advertisements by state or local governments	4

[1] Base = 68 companies; multiple responses were permitted.

What *has* changed over the years is the *relative* importance of some of the factors to individual companies, especially in the absence of industry-specific requirements. However, a review of the literature reveals a consensus that, on an aggregate basis, it is difficult to determine the relative importance of various factors because factor needs differ from industry to industry, and from time to time, and from one type of plant to another.[10]

Factors in Urban-Site Selection

Two-fifths of the responding companies have *deliberately favored* urban sites over what they describe as equally attractive suburban or rural sites. Those that *do not deliberately favor* urban locations cite several general reasons. As noted, on a macro basis, the geographic dispersion of manufacturing to suburbs and rural areas is a long-established trend. On an individual company basis, firms usually choose locations based on specific economic and operational factors. These factors, particularly operational space requirements, may limit their site needs to nonurban areas. And for noneconomic reasons, such as quality-of-life considerations, some companies avoid city locations for certain of their plants.

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[8] Miriam Hawley (Project Director), *Business Location Decisions—A Review of Literature*, Berkeley, Cal.: Pacific Consultants, 1981, p. 47.

[9] Schmenner, 1980 p. 123.

[10] George A. Reigeluth and Harold Wolman, *The Determinants and Implications of Communities' Changing Competitive Advantages: A Literature Review*. Washington, D.C.: The Urban Institute, 1981, p. 2.

Table 6: Ranking of Factors in Decision to Select Urban Sites over Equally Attractive Suburban or Rural Sites

	Factors (percent of respondents assigning rank order to the factor)						
Rank Order	*Labor*[1]	*Financial*[1]	*Marketing*[1]	*Production or Site*	*Quality of Life*	*Commitment to Urban Revitalization*[1]	*Other*
1	27%	24%	31%	8%	9%	2%	—
2	30	21	12	25	5	3	2%
3	19	21	11	22	13	2	2
4	11	24	9	25	16	—	2
5	5	5	18	9	33	11	—
6	2	—	5	—	9	55	2
7	—	—	—	—	—	3	—
No mention of factor	8	6	15	11	15	25	92
Totals	100%	100%	100%	100%	100%	100%	100%

[1] Details do not add to 100 percent because of rounding.

Note: 67 executives responded to this question. Although more than 90 percent assigned a rank for three factors, many did not assign a rank order for any factors beyond what they considered to be the three most important. Therefore, the rows across do not add to 100 percent.

The respondents to this survey have located at least one plant in a major city—but several have also located plants in nonurban locations. Since most of them have not deliberately favored urban locations, it would seem that their choice is motivated primarily by the traditional site-selection factors—marketing, labor, financial considerations, and so on. Table 6 presents the rankings of urban site-selection factors, by category.

It is apparent from this table that the traditional economic factors are still given the most weight when a company makes its site decision. Labor considerations, in particular, are most often cited as one of the two top factors. This is consistent with an earlier Conference Board finding in which more than 50 percent of the survey respondents pointed to one or another of the labor issues as a major factor in plant locations.[11]

Although financial considerations are not necessarily the most important to every manufacturer, certainly they are of major concern to almost all. And, although production or site is not frequently the number-one factor, its importance is apparent from its even distribution over the next three ranks. Marketing considerations obviously vary somewhat in importance and, as mentioned

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[11] Leonard Lund, *Factors in Corporate Locational Decisions*, The Conference Board, Information Bulletin No. 66, 1979.

Table 7: Factors Considered in Urban-Site Selection

Factors Considered	*Frequency of Mention*[1]	*Considered Very Important*[2]
Marketing		
Proximity to major customers	77%	71%
Shipping or freight availability (transportation)	74	72
Proximity to major distributors	38	58
Financial		
Cost of land	79	44
General cost reduction	66	73
Cost of renovation against cost of new construction	66	62
Government incentives or inducements	65	52
Tax situation (present and future)	63	72
Availability of private financing	37	48
Labor		
Availability of skilled labor force	79	78
Labor costs	77	85
Availability of unskilled labor force	65	59
Union considerations	57	80

Table 7: Factors Considered in Urban-Site Selection (continued)

Factors Considered	*Frequency of Mention*[1]	*Considered Very Important*[2]
Production and Site		
Room for expansion	82	77
Utility *service* (e.g., water and power)	77	83
Adequate energy *supplies*	71	83
Adequate infrastructure (e.g., roads and sewers)	68	65
Proximity to raw materials	43	45
Proximity to special support services	38	54
Proximity to components	34	39
Quality of Life		
Local attitude toward business	77	79
Housing	62	71
Effectiveness of local government	52	54
Stability of local government	52	46
Crime	50	65
Public transportation availability	46	45
Public education system	44	70
Urban amenities (e.g., restaurants, cultural facilities)	43	34
Climate	40	30
Recreational facilities	35	25
Other public services (e.g., garbage collection, fire protection)	31	24

[1] Multiple responses were permitted. The base for this column is 68 respondents.

[2] The numbers in this column are percentages of those that consider each factor, not a percentage of the total base.

previously, probably depend on the nature of the plant.

The respondents were also asked to indicate all the specific factors that they consider in their urban-site decisions. And they were asked to indicate whether each factor that they consider is very important or moderately important to their decision. Table 7 presents a list, ranked by frequency of mention within each major category, of factors considered. The second column shows the importance of each factor to those companies that consider it. It is clear, again, that the respondents mention the traditional economic factors more often than the noneconomic factors, with one exception—"local attitude toward business." (This factor is discussed in more detail under Government Regulations.)

Although in most cases the importance rate corresponds roughly to the frequency-of-mention rate, there are a few exceptions. "Cost of land," for instance, has a high frequency-of-mention rate and a relatively low importance rate.

In those cases where there is a relatively low frequency-of-mention rate and a higher importance rate—for example, proximity to major distributors, union considerations, proximity to special support services, and the public education system—it can be assumed that industry and company needs and priorities account for the differences. The significance of union considerations, for instance, varies by industry. Similarly, industry variations would account for the importance of proximity to major distributors and to special support services.

Obstacles to Urban Location

Certain distinct characteristics of urban areas are viewed by many manufacturers as obstacles to plant location (see Exhibit 1). In response to a question on some of the principal obstacles that companies have had to overcome because of the urban locations of their manufacturing facilities, the firms mention costs of such items as labor, land and taxes. Some of the other obstacles they note include security or crime problems; government regulations (particularly zoning) and red tape, which delay construction and start-up; lack of space for expansion; and labor factors such as availability, productivity and union considerations. One respondent commented that the principal obstacle is the "residual effect of generations of ingrained racism."

Some of the negative attributes of certain city locations are, of course, a matter of perception, and vary by city. Even some companies that have located successfully in urban areas, for instance, feel that there are definite problems in urban locations. As one respondent, a food processor commented: "Although we experienced a very positive attitude on the part of local government, I understand that this is a frequent obstacle. Vandalism is a problem, though we have had but one instance in 14 months."

Exhibit 1: Urban Advantages and Disadvantages[1]

URBAN ADVANTAGES	*URBAN DISADVANTAGES*
AGGLOMERATION and SCALE ECONOMIES (availability of support services)	
BUILDINGS Renovating existing structures is often cheaper than new construction; Tax credits may be available for renovations	BUILDINGS New manufacturing technology may require horizontal, rather than vertical, layout
	BUSINESS CLIMATE[2] Small businesses may not get enough attention; Cities often concentrate efforts on large manufacturers
ENERGY Adequate public utilities in place; Use of public transit eliminates expensive commuting and conserves energy	ENERGY May not be near cheap or plentiful energy source
INFRASTRUCTURE Already in place	INFRASTRUCTURE May be badly deteriorated
LABOR Large labor pool	LABOR Labor costs may be high; Productivity may be low; Professional and skilled workers may be unwilling to locate in, or commute to, central cities
	LAND[2] Often not available in large enough parcels; Very high costs
QUALITY OF LIFE Cultural amenities	QUALITY OF LIFE Inadequacy of public schools; Incidence or fear of crime; Congestion, discomfort and so forth
TAXES Special incentives and abatements often available	TAXES Usually higher in city
TRANSPORTATION OF GOODS Usually close to or on major modes (rail, air, water, etc.)	TRANSPORTATION OF GOODS Streets may be too congested for efficient trucking
TRANSPORTATION OR TRANSIT—EMPLOYEE Extensive, cheap public system may be available	TRANSPORTATION OR TRANSIT—EMPLOYEE Public system may be inefficient, unsafe; Parking may be unavailable or very expensive

[1] Some of these may vary by industry.

[2] Usually viewed as a disadvantage. However, in recent years, city officials have tried to overcome the problem.

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Crime—and the Fear of Crime—as a Site-Selection Factor

Crime and the fear of crime have become issues of increasing national concern—and they certainly have an impact on site-location decisions. During the 1970's, according to the FBI, there was a 50 percent increase in crimes reported to law enforcement agencies. And a recent report on crime found that "two out of every five Americans are afraid they will be murdered, raped, robbed or assaulted." One of the conclusions of this report, known popularly as "the Figgie Report," was that "as a result of our fear we may soon be living in armed fortresses—both at home and within ourselves."[12]

Crime is especially linked with cities, where it is often discussed in even more dramatic terms. Chief Justice Warren E. Burger, for instance, has described the "reign of terror" in American cities. He stated that: "For at least 10 years many of our national leaders, and those of other countries, have spoken of international terrorism but our rate of routine, day-by-day terrorism in almost any large city exceeds the casualties of all the reported 'international terrorists' in any given year.'"[13]

Crime has taken on more significance as a factor in site-selection decisions. (See box). One-half the respondents to this survey report that they seriously consider it in their urban-site decisions. Of these, almost two-thirds view it as a *very important factor*. Indeed, three out of ten executives respond that the crime situation at a particular urban site has been so severe that it caused them not to locate a plant there.

Almost one-half the respondents consider personal assault to be the category of crime most detrimental to locating plants in urban areas. Other executives choose vandalism (19 percent), arson (15 percent), burglary (13 percent), or robbery (5 percent) as the form of crime that is most likely to influence a decision.

Despite extensive public discussion of the inadequacy of municipal services, almost one-half the executives questioned believe that urban governments have budgeted adequate funds to provide for police protection in areas where they have manufacturing facilities. It may be that these companies have deliberately located where they believe the police protection to be adequate. At the same time, over one-third of the respondents are uncertain about local security, perhaps reflecting a lack of detailed knowledge at the corporate level about the conditions in branch-plant communities—especially if there have been no reported security problems.

Less surprising is the belief of almost one-half the executives that there are significant differences in the effectiveness of police forces in the various urban sites that they have considered. Again, almost one third are uncertain about this point. More than two out of five companies have met with the local police to discuss the law enforcement and security needs of their plant and employees when considering urban sites. And all but one of this group have found the police to be sensitive and responsive to their needs.

Of course, the actual crime rate and the *perception* of the crime rate often vary dramatically. Media coverage, regional viewpoints, historical image, and so on, influence an executive's opinion of a city and its crime situation. The respondents were asked to rank six cities, based on their perception or knowledge of them, in terms

CRIME TRENDS:
CITIES, SUBURBS AND RURAL AREAS

If one examines 1979 and 1980 FBI crime data to compare cities, suburbs and rural counties, the overall differences are not as great as might be expected. The tabulation below, for example, presents the percent change in the total crime index, violent crime, and property crime. Different rates of increase in violent crime are dramatic but the other two categories are not.

	Percent Change (1979-1980)			
Cities (by population)	*Number of Cities*	*Crime-Index Total*[3]	*Violent Crime*[4]	*Property Crime*[5]
1,000,000 and over	6	12.7%	13.1%	12.6%
500,000 to 999,999	17	8.2	10.9	7.8
250,000 to 499,999	33	11.8	13.7	11.5
Total of above ...	56	11.1	12.7	10.9
Suburban Area[1] ..		8.4	10.4	8.2
Rural Counties[2] ..		11.0	3.8	11.7

[1] Includes suburban city and county law enforcement agencies within metropolitan areas. Excludes core cities.

[2] Includes state police agencies with no county breakdown.

[3] Includes murder and nonnegligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny-theft, and motor-vehicle theft.

[4] Includes murder, forcible rape, robbery and aggravated assault.

[5] Includes burglary, larceny-theft, and motor-vehicle theft. Data are not included for the property crime of arson.

Source: U.S. Department of Justice, Federal Bureau of Investigation, *Uniform Crime Reports for the United States*, September 10, 1981, Table 10.

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[12] Sponsored by Figgie International Inc., conducted by Research & Forecasts, Inc., *The Figgie Report Part II: The Corporate Response to Fear of Crime*. Willoughby, Ohio: Figgie International, 1980 p. 7.

[13] Warren E. Burger, "Report of the Chief Justice to the A.B.A.—1981." *American Bar Association Journal*, March, 1981, pp. 291-292.

Table 8: Perception of Crime Levels in Six Cities

("1" indicates the city with the highest level of crime, and "6" indicates the city with the lowest level)

	Actual Rank[1]	Rank as Perceived by Respondents[2]			
City	Crime Rate	Crime Rate[3]	Risk to Plants[4]	Risk to Employees[5]	Risk of Crime by Employees[6]
Miami	1	2	3	3	2
Phoenix	2	5	5	5	5
Detroit	3	3	1	1	3
New York	4	1	2	2	1
Los Angeles	5	4	4	4	4
Raleigh-Durham[7]	6	6	6	6	6

[1] *Uniform Crime Reports—Crime in the United States*, U.S. Department of Justice, Federal Bureau of Investigation, September 10, 1981.

[2] Respondents were asked to rank the cities for each category of crime or risk. The responses were weighted as follows: each rank was assigned a value—number 1 was assigned a value of 6 points, number 2 was assigned a value of 5 points, and so on. For each city, the number of responses for each rank was multiplied by the value of the rank, and the total was divided by the total number of responses for the city. The cities were then rank ordered.

[3] Criminal incidents per 100,000 population. New York's crime rate was perceived to be the highest overall (by weighting the responses) of the cities in this group. Interestingly, both Miami and Detroit, respectively, were cited more frequently than New York as the number-one crime cities.

[4] Risk that manufacturing plants will be the objects of crime (e.g., burglary, larceny, robbery).

[5] Risk that manufacturing plant employees will be the victims of crime (e.g., mugging, robbery, rape).

[6] Risk that employees will commit crimes against their employers (e.g., employee theft, embezzlement).

[7] Data for the cities of Raleigh and Durham were averaged.

of four categories of crime. The results are presented in Table 8.

In terms of crime rate, only Raleigh-Durham and Detroit were ranked by the respondents in the same order as the actual 1980 FBI ranking for this group of cities. The respondents obviously perceive New York, Miami and Detroit as cities with comparatively higher crime levels than Los Angeles, Phoenix or Raleigh-Durham. Their perception of the crime rates in Phoenix and New York, when compared to the actual FBI data, are the most dramatic reversals of the actual rankings.

A recent study by the U.S. Joint Economic Committee found that "the greatest difference between cities perceived to have the most favorable business climate and the least favorable business climate are in quality of life characteristics and not business related factors. . . ."[14] And, in relative terms, the study found that the crime level was the second most frequently mentioned characteristic influencing a firm to stay or expand at their present location.

The Figgie report found that "senior executives of *Fortune* 1,000 companies are taking a very active stand in combatting personal and corporate crime." More than three-fifths of these have burglar alarms and electric floodlighting; one-half have automatic light timers and closed circuit television; about two-fifths have electronic card identification systems; and, one-quarter have armed guards.

The report goes on to say: "The burgeoning crime rate and the executives' subsequent fear of crime certainly is one reason they are taking these and other precautions. In fact, 46 percent of senior executives say that crime in their corporate neighborhood has affected company security policies. . . . A few companies have even considered relocating because of the threat of crime.[15] Although this study focused on headquarters' precautions and policies, it is reasonable to assume that security at plant locations is also a major concern.

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[14] Deborah Norelli Matz, *Central City Businesses—Plans and Problems.* U.S. Congress, Joint Economic Committee, Subcommittee on Fiscal and Intergovernmental Policy. Washington, D.C.: U.S. Government Printing Office, 1979, p. 24.

[15] Figgie International Inc., pp. 8-9.

Impact of Government Incentives, Assistance and Regulation

There has been a great deal of debate and much has been written on the effect of government incentives, assistance and regulation on plant location. Many observers point out that most government incentives, or at least the finanical incentives, do not have a major impact on most location decisions.

Government Incentives and Assistance

Incentives to businesses are advocated by some government officials as a means of encouraging expansion or new investment and, hopefully, of generating new jobs. The idea is that, ultimately, additional jobs lead to increased government revenue in the form of a larger tax base. However, some experts have contended that business incentives do not lead to new output or jobs, but that there are real costs associated with them in the form of foregone tax revenues that might have had valuable alternative uses. They also contend that some of these incentives, in effect, raise the price that state governments and certain private investors have to pay for borrowing capital from the private sector.[16]

The competition for new business among the states has accelerated in the past decade with a proliferation of business incentives. Economic development specialists increasingly express concern that these incentives are unnecessary and costly, and have very little direct impact on business-location decisions. In the competitive situation that has developed, however, every state wants to offer the same inducements that are available in most other states. The result is that the real differential between states is almost nil and, in the meantime, each state has lost revenue. Furthermore, some analysts argue, these incentives are often a "windfall" for a business that might have selected the same location regardless of government incentives.

Tax incentives are perhaps the most popular inducements offered by state and local governments. Proponents feel that taxes act as an obstacle to business investment and, therefore, should be abated or reduced in order to stimulate investment. They also argue that local tax incentives are viewed as an indicator of a city government's attitude toward business. Therefore, if incentives are not offered, business people might rate the city's business climate negatively.

A recent study by Michael Kieschnick for the Council of State Planning Agencies examines some of the justifications for, and evidence against, tax incentives. Some of the arguments he identifies against tax incentives are: The loss in state revenues is substantial; most firms only consider locating in the one state in which they finally locate; most firms are unaware of the tax incentives available in the state in which they make the new investment; and only a very small percentage of companies say that they would have located in another state if tax incentives had not been available.[17]

Most authors on this subject agree that assistance is not critical to the majority of location decisions, although its importance does seem to vary somewhat by region. However, government assistance and incentives are certainly taken advantage of if a company is aware of their existence. Yet, administrators at all levels of government indicate that few companies are aware of existing tax or nontax incentives.[18] In those cities in which significant use has been made of the incentives, it has largely been the result of efforts by knowledgeable developers (both public and private).

Among the firms responding to this Conference Board survey, government aid and tax incentives seem to be a more significant factor. More than three out of four respondents to The Conference Board's study indicate that they have obtained assistance from federal, state or local government agencies in their search for new plant sites in cities. Of these, 75 percent (37 companies) say that government incentives or inducements are important to their decisions to select sites within city boundaries.

This response may not actually contradict other researchers, who find that taxes and other government incentives are seldom a major factor in a company's site-selection decision. However, if a company, at the end of its site-selection procedures, is choosing between two otherwise equally attractive sites, these incentives may then make a difference. The Conference Board respondents may have been referring to this final stage. For some respondents, taxes and other incentives may have been decisive in a final choice between a suburban or an urban location.

Also, by providing a list of incentives from which to choose, the questionnaire to which they were responding may have made them more aware of the financial incentives. In any case, only 23 companies (about one-third of the respondents) say that government financial incentives

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[16] Bennett Harrison and Sandra Kanter, "The Political Economy of States' Job-Creation Business Incentives." *Journal of the American Institute of Planners*, October, 1978.

[17] Michael Kieschnick, *Taxes and Growth—Business Incentives and Economic Development.* Studies in Development Policy, Vol. 11, Washington, D.C.: Council of State Planning Agencies, 1981, p. 83.

[18] The Conference Board has been asked by various government agencies to convene meetings so that information can be disseminated to the business community about the various incentive programs and so that the private sector will be encouraged to make greater use of the programs.

Table 9: Government Assistance or Incentive Ranked by Number of Mentions

Type of Assistance or Incentive	*Incentives Made Available Number of Mentions*	*Relative Importance (by number of mentions)*	
		Very Important	*Moderately Important or Not Important*
Tax Considerations and Incentives			
Investment tax credits	28	12	16
Accelerated depreciation tax incentives	22	12	10
Property tax abatements, exemptions or moratoriums	20	11	9
Job-creation tax incentives or credits	18	4	14
Corporate income-tax exemptions, credits or moratoriums	13	8	5
Special tax incentives for locating in distressed areas	9	3	6
Tax incentives for research and development	7	—	7
Inventory taxes	1	1	—
Financial Assistance or Incentives			
State industrial financing programs (e.g., industrial revenue bonds, loans, loan guarantees, grants)	38	24	14
City or county industrial financing programs	21	15	6
Federal incentives, grants, loans and loan guarantees (e.g., Urban Development Action Grants)	14	6	8
Services for Industrial Development			
Expedition of the license and permit process	26	17	9
Zoning variances and changes	23	15	8
City or county site-selection assistance	22	10	12
Availability of publicly owned industrial park sites	21	5	16
State site-selection assistance (including feasibility studies and land assembly)	20	5	15
Utility and infrastructure improvements	20	18	2

Note: Base for this table is 52 respondents. Multiple responses were permitted.

are *very* important as a factor in their urban-site decisions (see Table 7).

The respondents to this survey were asked to indicate which incentives have been made available to them, and to indicate how important each one is in their location decision. The results are presented in Table 9.

State industrial financing programs are widely available to the companies surveyed, and are rated as "very important" by more than 60 percent of these firms. City or county industrial financing programs are less widely available (only 21 of 52 companies mention them), but three-quarters of these same companies find them to be very important. Similarly, less than one-half of the respondents have been offered zoning variances and changes, but almost two-thirds of those that have find them to be very important. In addition, utility and infrastructure improvements are very important to 90 percent of the companies that have had them made available.

Almost six out of ten executives say that government administrators and officials have been very attentive and helpful in response to their firms' requests for assistance during the site-selection process. Less than one out of ten characterize the government response as only slightly attentive or not attentive, and about a third describe it as moderately attentive.

A few executives volunteered a brief "package" of government incentives that they thought would enhance the location of manufacturing plants to cities. One small food processor, for instance, suggested a "combination of available public land at reasonable cost, plus a term of property-tax abatement, guaranteed assessment over 10 to 15 years, and tax-exempt industrial revenue bonds." Another small businessman mentioned a "package" of "investment tax credits, property-tax consideration, help from trade schools, transportation help, and various types of financial help as required."

Government Regulations

Although many business executives do not question the underlying goals of regulatory legislation safeguarding the public interest, there is business opposition to the costs of compliance and the perceived inefficiency of the regulatory system. There is some disagreement on the actual costs and benefits of government regulation, but there is agreement that these regulations have had at least some impact on business-location decisions. While federal regulatory reform may provide relief and have some impact on business-location decisions, state and local government regulations often have a more direct and immediate effect on the actual location decision.

Federal Regulations—Effect on Small Business

While many business people feel that Federal Government regulation has been a deterrent to economic growth in general, it is small businesses that bear the heaviest relative burden—in spite of the relief and exemptions given them recently. This is especially damaging to economic growth in cities that rely so much on small businesses for new job creation.

Government regulations in the past stipulated the same compliance requirements for both small and large businesses. Small business was said to find itself at a competitive disadvantage because of the lack of efficiencies of scale in meeting regulatory requirements.

A recent White House report on the subject said that, in many instances, "regulatory controls have served to restrict new, small firms from entering markets, to limit price competition between existing companies, and to narrow the range of services available to the public. . . . The unique impact of economic regulation on small business results from the increased market rigidity imposed."[19]

The Federal Government has instituted a regulatory reform program in recent years, which is aimed at companies of all sizes, although it particularly recognizes the small-business sector's burden. The Regulatory Flexibility Act of 1980 (P.L. 96-354), for instance, provides a mechanism for undertaking the effort to assure that the growth and development of small business will not be impeded unnecessarily by existing regulations.

State Regulations

Some writers predict that there will be more, rather than less, regulation in the near future at the state level. For instance, a September, 1981, article in *Nation's Business* started with this warning:

> "The dream of American business—to get the federal government off its back—is materializing, but that dream may be turning into a nightmare because 50 other governments are clamoring to jump on board. Virtually every one of the 50 state legislatures has trained its sights on business, raising taxes, expanding regulation and even challenging the day-to-day decisions of company managers and owners. The trend began in the late 1970s, but the election of Ronald Reagan as President—heralding huge cutbacks in federal help to the states and severe reductions in the federal regulation of business—has triggered an onrush of business-related legislation in one state capital after another."[20]

Many business executives have expressed concern at having to deal with 50 state legislatures, 2,500 state regulatory agencies, and many special interest groups.

Some sources, however, are not as pessimistic. The fourth annual survey of state and local elected officials, published in the *Site Selection Handbook* 1981, found "some signs of change in state and local government that parallel the national trends, notably an increase in control over state budgets and some reduction in the regulatory burden on industry. These changes lead us to conclude that the climate for industrial expansion is becoming more favorable, not only in Washington, but in state and local capitals as well."[21]

The *Handbook* does state that "with the environmental movement in the 1980s, states have adopted a variety of development controls that in some cases have gone well beyond federal mandates and have delayed or aborted new plant construction." But when queried about recent or anticipated changes toward more or less restriction, "most of the respondents indicated no change in their regulations. Where changes have occurred or are anticipated, however, they show a trend toward less restrictive regulation by states and cities and more restrictive regulation by counties."

In an effort to attract new business investment, state and local governments have tried to ease or simplify their permit application procedures and to eliminate unnecessary regulation. "One-stop shopping systems"—state offices set up to help industry meet state regulatory standards—and the reduction of paperwork requirements, for instance, have become important state development tools in recent years.

Other state regulatory roles also have an impact on industrial growth. As an illustration, state banking regulations can affect the amount of capital available for business financing. Small, new businesses, in particular, may be affected by limited commercial loan supplies. States also have primary authority for land use, although some of this authority may be given to local government units.

Similarly, state regulation of the insurance industry has a direct impact on businesses, particularly small businesses in declining urban areas. In order to obtain a commerical loan, a firm must usually have comprehensive insurance coverage. However, insurance "redlining" often prevents small businesses in inner-city neighborhoods from obtaining adequate insurance at a reasonable price.

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[19] U.S. President (Ronald Reagan), *The State of Small Business: A Report of the President.* (Transmitted to the Congress March, 1982.) Washington, D.C.: U.S. Government Printing Office, 1982, pp. 150-151.

[20] Vernon Louviere, "The States Go Marching In," *Nation's Business*, September, 1981, p. 48.

[21] Conway Publications Inc., *Site Selection Handbook.* Atlanta, Ga.: Conway Publications, Inc., 1981, pp. 372-384.

Local Regulations

Government regulations at the local level are a particular problem for small business. As one writer, Stuart Butler, says: "In many cities these local regulations and permits are the last straw for the would-be businessman." Butler, as already mentioned, is a leading proponent of enterprise zones. While his remarks are focused on the advantages of these zones, his observations are also relevant to any discussion of urban economic development and apply to larger companies as well. "Although the streamlining of federal regulations may be important for the encouragement of new business in an Enterprise Zone, it is generally agreed that perhaps the greatest bureaucratic obstacles exist at the local level. Zoning, building codes, permits and other restrictions serve to push up the cost of new activity, or to prevent it."[22]

Business Climate

The business climate in a city is also related to local government regulation. Companies often perceive the cost and complexity of regulation at the local level to be an indication of the city government's attitude toward business. This atittude is believed to be a fundamental part of the local business climate. Business climate, however, is a qualitative rather than a quantitative factor and is, therefore, difficult to measure or define.

The Joint Economic Committee study cited previously found that "the perceived business climate of a city closely parallels the perceived quality of life in that city. Again, although the city government's attitude toward business was a major variable in the perception of business climate, the author wrote that it "is probably not conditioned by any one factor, but is a reflection of a combination of municipal functions and attitudes."[23]

A 1979 Conference Board study did not find that business (and social and political) climate was a *major* factor in local capital investment decisions. Rather, business climate was found to be more of a consideration "for the avoidance of a location which has problems than as an attraction to a community." Some executives were more concerned about "the precise way in which the unfavorable business climate is a reflection of high labor costs, taxes and cost of local government."[24]

Most experts in the field would agree that a city government's attitude toward industrial development is often reflected by how quickly and sufficiently it responds to requests and by what it does to streamline the regulatory process and reduce time delays. Large city and state government bureaucracies have often stifled business decision making in the past. As one respondent to this Conference Board survey commented in response to a question on particularly onerous government regulations: "It is not so much the regulations as the length of time it takes to work through all the agencies."

In response to these problems, many city and state governments have created the post of ombudsman to expedite the regulatory process. Unfortunately, once a city has gained a reputation for a "bad" business climate, the perception is hard to change. (Of course, the reverse is also true.)

Impact of Government Regulations on Site Selection

In response to specific questions on the subject, more than three out of five executives report that certain government regulations have influenced their site- selection decisions. Of these, more than four out of five mention the influence of state regulations; three out of four mention local regulations; and one-half mention federal regulations.

Obviously, location decisions are more directly affected by state and local regulations. Indeed, one executive said: "Usually the major problems are at the state level and can be remedied only at that level."

The 42 respondents who have been influenced by government regulations were asked to indicate which regulations have adversely affected or inhibited their plant-location decisions and their responses are presented in Tables 10 and 11. These tables are organized by level of government and by type of regulation. The two most frequently mentioned regulations are environmental and

Table 10: Regulations that Have Adversely Affected or Inhibited Plant-Location Decisions

Type of Regulation	*Frequency of Mention*[1]
Environmental (including pollution control)	69%
Labor legislation	50
Zoning and building codes	33
Insurance requirements (fire and theft)	26
Safety (OSHA, etc.)	19
Equal employment opportunity and affirmative action	12

[1] Multiple responses were permitted.

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[22] Stuart M. Butler, *Enterprise Zones—Greenlining the Inner Cities.* New York: Universe Books, 1981, p. 59.

[23] Matz, p. 3, 24.

[24] Lund, p. 11.

labor, and, in both cases, it is the state regulations that are perceived to be most restrictive. The comments of one respondent sum up the negative feeling of many business people: "Much environmental legislation is cumbersome and heavily weighted against change of any type."

State labor legislation and regulation have had an adverse impact on plant-location decisions for two-fifths of the companies in this survey. However, the importance of labor unionization seems to vary by industry.

According to Schmenner, some labor-intensive industries, such as apparel and shoe manufacturing, seek low-wage locations. For them, labor *cost* is the primary consideration, and the degree of unionization is only incidental. Some capital-intensive industries, such as petroleum refining, also are not greatly concerned with employee unionization when choosing sites. Some capital-intensive companies, however, are concerned with the unionization of construction labor at various locations—work stoppages or exceptionally high construction costs would be a major consideration for many of these companies that have so much money invested in plant and equipment.

Schmenner found that industries that view unionization as a primary concern are between the extremes of capital intensiveness and labor intensiveness. In particular, lower technology companies in metal fabrication and equipment manufacturing are most concerned with nonunion locations. At least one reason for this concern is their need for flexible work rules to deal with technological advances in the products and the production process.

Table 11: Regulations that Have Adversely Affected or Inhibited Plant-Location Decisions, by Level of Government

	Level of Government		
Type of Regulation[1]	Federal	State	Local
Environmental (including pollution control)	29%	43%	29%
Equal employment opportunity and affirmative action	7	7	—
Insurance requirements (fire and theft)	2	14	17
Labor legislation	7	41	17
Safety (OSHA, etc.)	12	2	5
Zoning and building codes	—	—	29
Other	—	5	7

[1] Multiple responses were permitted.

These companies tend to look first at sites in one of the "right-to-work" states, unless there are other overriding considerations such as raw material needs. As Schmenner points out, however sophisticated companies recognize that the strength of union organizations and union activity may vary within states, so that "right-to-work" laws are not usually the sole consideration. Still, as Schmenner remarks, "having a right-to-work law on the books is a powerful public policy for any state, one that clearly differentiates that state from others in the minds of many companies and one which shows up statistically in the results."[25]

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[25] Schmenner, 1980, p. 352.

Conclusion

In reviewing the findings of this study, three salient points are expressed by the survey respondents. First, traditional economic factors are still predominant in new urban facility-location decisions. And, of these, labor considerations are cited most frequently as being of major importance.

Second, company executives emphasize several characteristics of urban locations that cause them concern: security or crime factors, taxes, government regulations and red tape, labor supply and unions. These characteristics, according to the respondents, have often been obstacles to locating in cities.

Third, regardless of the government incentives offered, most location decisions are based on such business considerations as long-term return on investment. It is not suprising that executives respond most to those government incentives that are likely to give them the maximum economic advantage.

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International Outlook 1983

The Corporate Perspective

by John Hein
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The Conference Board

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THIS REPORT, the seventh of its kind, is based on material submitted by a panel of economists, planners and analysts in U.S. private industry. As in previous years, the panel members were asked by The Conference Board for their assessment of economic conditions abroad during the coming year, particularly in countries "that are important to your company's foreign operations or on which you normally gather information."

The report is based on the replies received from panelists in 12 major business organizations. Eight of these are among the 250 largest U.S. industrial corporations as listed by *Fortune;* two each are in the financial and transportation sectors. Most of the material submitted was prepared between early July and early September.

The Conference Board believes that this kind of survey is valuable, since corporate assessments are important in determining the level and mix of capital expenditures, marketing programs, and production schedules for the companies' international activities. Indeed, as one of the panelists pointed out, his data and assumptions "are intended to serve as guidelines for planning" in the period immediately ahead. But the material "will be useful not only to planning departments, but also to other departments such as purchasing, pricing and marketing, where general economic conditions have a major impact."

The material does, in fact, represent a great variety of opinions and forecasting styles—from hunch and pure judgment to rather elaborate, computer-based forecasts. But it is worth stressing that the data, prepared as they are for internal corporate use, are not predictions, but merely estimates of the ranges within which certain parameters might fall in the near term. As one panel member noted, the material spells out "what we regard as the most likely course" for the various economies and for financial markets through the company's planning period.

Thus, as someone had pointed out in a previous survey, the estimates represent the mean results of the possible paths foreign economies might follow in the absence of major shocks or disruptions. Still, the projections may be read and interpreted differently, depending on the user's corporate function or industrial sector. According to one panel member: "The high degree of uncertainty in the outlook and disparity of dissenting views among economists underscores the need for each division to evaluate the impact of alternate economic scenarios on its particular business. For each division the relative impact will vary according to geographic commitments and industry sectors served."

General Overview

In its midyear economic review, released last July, the Organization for Economic Cooperation and Development (OECD), which encompasses the 24 major industrial countries, noted: "The influences now acting upon OECD economies are diverse, and are moving countries into somewhat different cyclical phases. A recovery in activity is thought to be occuring currently in Europe and Japan, and one is expected in North America in the second half of this year." But, the review noted, "there will probably be important differences between the United States, Japan and Europe," with gross national product (GNP) growing by little more than 2 percent next year in the United States, by 2½ percent in Europe, and by slightly under 4 percent in Japan (see Table 1).

The Conference Board's *International Economic Scoreboard* commented in a similar vein in August that "prospects for recovery from the world recession are more promising in Europe and Japan than in the U.S. and Canada, according to the most recent data for the leading indicators."It therefore saw world recovery hinging on "the development of an upswing in the U.S. and Canada, which is still problematical." In October, the *Scoreboard* noted further declines in the indexes for the United States and Japan, while "smaller declines in France and Italy and continued stagnation in Canada make the world picture more somber than it was two months ago" (see Chart 1).

The panel shared this generally cautious view about economic recovery in the major industrial countries, although there were some noticeable differences of opinion about both the stimuli to and the strength of business activity in the year ahead. Much was seen as depending on developments in the United States. "Gradual improvement in economic activity," one panelist writes, "is expected to become evident during the second half of 1982, based on modest gains in consumer spending, inventory replenishment, and increasing ex-

Table 1: Official Growth and Inflation Forecast (Percentage changes at annual rates)

	From previous year		*From previous half year*		
	1982	*1983*	*1982*	*1983*	
Growth Real GNP			*Second half*	*First half*	*Second half*
United States	− 1.5	2.25	2.0	2.0	2.75
Canada	− 1.75	1.0	− 1.5	1.75	2.25
Japan	2.0	4.0	3.0	4.0	4.75
France	2.25	2.5	3.0	2.25	2.25
Germany	1.0	3.25	2.0	3.5	3.75
Italy	1.5	2.5	2.5	2.75	2.75
United Kingdom	1.25	1.75	2.0	1.5	1.75
All seven countries	0.25	2.5	2.25	2.5	3.0
Other OECD countries	1.5	2.5	2.0	2.5	2.5
Total OECD	0.5	2.5	2.25	2.5	3.0
GNP Deflators					
United States	6.0	5.5	5.0	5.75	6.0
Canada	10.5	10.0	10.0	9.75	10.0
Japan	3.5	3.75	3.25	4.25	3.5
France	13.75	13.75	13.5	14.0	13.0
Germany	4.25	2.75	3.0	2.5	2.5
Italy	15.5	15.0	15.5	15.0	14.5
United Kingdom	8.5	7.5	7.75	7.75	6.75
All seven countries	7.25	7.0	6.5	7.0	7.0
Other OECD countries	11.25	10.5	11.0	10.25	10.0
Total OECD	8.0	7.5	7.25	7.5	7.5

Source: Organization for Economic Cooperation and Development, *Economic Outlook*, July, 1982.

ports for the major industrial countries." But continued growth of economic activity outside the United States next year is "contingent upon some further easing in the real cost of credit and recovery in the U.S. economy."

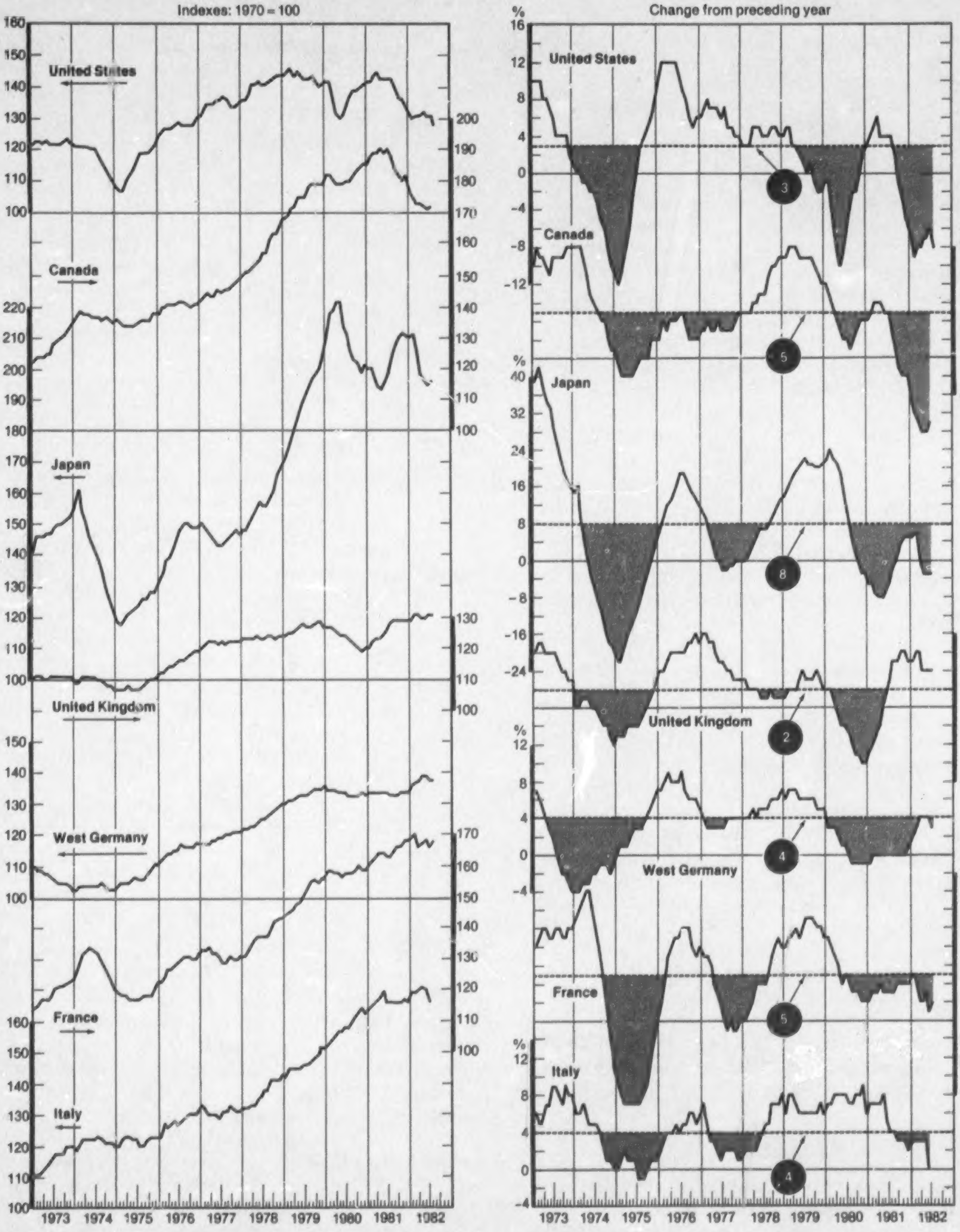
At the same time, however: "It is not inconceivable that some countries, despite much public posturing against 'exaggerated' dollar strength, are in fact not too unhappy at the de facto devaluation that helps their export industries." And: "I am fairly sure that U.S. imports would be much weaker if the dollar were not so strong. We expect a lot of pickup in imports next year because of the dollar despite our poor outlook for the U.S. economy."

Another correspondent casts his net wider. "Economic data continue to confirm the beginnings of recovery in Europe and the bottoming-out of the recession in North America. But tight monetary policy and high interest rates in the United States have kept the pace of the recovery slow by historical standards and will perpetuate the continued rise of unemployment for some time to come. The smaller OECD countries and the newly industrializing economies of the Pacific and Latin America will have to wait until late this year or early 1983 before demand from the larger countries of Europe and the United States begins to pull their economies out of recession."

But any eventual recovery will be modest, by historical standards, according to most panelists, with growth constrained by forces affecting all components of business activity. One panelist examines these forces in some detail.

> "Personal consumption expenditures will remain constrained by the sluggishness of real income growth throughout the OECD. After rising by 1.3 percent in 1981, real wages are projected to increase by no more than 1 to 1¼ percent in 1982, and by a similar percentage during 1983. Absolute declines in real wages are estimated in a number of countries in 1982, notably in Belgium, Norway, Ireland and Sweden.
>
> "Private-sector investment should reflect the completion of inventory liquidation, but outlays for plant and equipment will show little growth in light of their high opportunity cost relative to positive real returns or riskless and liquid financial assets. Government expenditures are projected to decline as a percentage of GNP as a conscious policy decision everywhere except in France, Italy and, conceivably, Japan, as the inflationary

Chart 1: Leading Business Cycle Indexes



Source: *International Economic Scoreboard*, The Conference Board, October, 1982.

effects of deficit spending have come to be better appreciated.

"There is a lingering hope that exports could provide the needed impetus, but this has always struck us as wishful thinking in view of the subdued worldwide growth environment, including prospects for an anemic recovery in the United States and the relentless Japanese export drive. It is interesting to note that even German export orders have recently been faltering despite the weakness of the Deutsche mark."

A second dissenting voice was heard: "Our U.S. outlook is considerably different from the consensus. We expect that this will have an impact on foreign economies, particularly those in Europe. Specifically, we are expecting a renewal of recessionary forces in the second and third quarters of 1983. We expect the U.S. economy to expand fairly strongly in the fourth quarter of this year and the first quarter of next year, but then to succumb to another decline as U.S. interest rates rise once again. This interest rate scenario will flow through Europe, causing a very weak second and third quarter in 1983."

Others, however, were somewhat more optimistic and detected some basic forces that, in the longer run, could put the world economy onto a more sustainable footing. "As 1982 progresses," one panelist notes, "the basis for a return to stability could be evolving through a convergence of the U.S., German and Japanese economies. To the extent that these leading industrial nations curb inflation and follow similar economic courses, the principal cause of volatility among their currencies would be much reduced. The emergence of less inflation, lower interest rates, and moderately stable exchange rates among the 'big three' would then contribute to more general world economic stability and greater prosperity in the 1980's."

One panel member, finally, detected even more hopeful signs amidst the general outlook. "There has been some fundamental and permanent improvement in inflation trends. The current weakness of world commodity prices is a factor in the improved inflation outlook. The declining price of oil, which looms so large in every country's economy, has been particularly favorable. There is major uncertainty about future oil prices. Governments of industrialized countries are attempting to stimulate investment growth. The policies which have had such painful repercussions for business in the short term are likely to create the foundation for a period of satisfactory growth later on."

Major Industrial Countries

The panel's assessment of the outlook for individual foreign countries generally pointed in the same direction, especially for Western Europe, Canada and Japan; there was slightly more variation for non-European countries (see Table 2). Of course, "improvement" or "better performance" for GNP and the inflation rate may not amount to very much if the relevant changes are small, or if growth this year has been zero or negative and inflation has been rampant.

Even where improvement in inflation and the rates of growth are foreseen, there still may be differing views as to the actual numbers for individual countries. Some of these projections for the major industrial countries are shown in Chart 2, in order to illustrate the range of "the most likely course" anticipated by panel members.

In discussing its annual report for 1981, optimistically entitled "Room for Maneuver," the Economic Council of *Canada* noted: "Canada's economic problems may not be as stubborn and unmanageable as everyone had thought. It now looks as if the federal government could develop effective policies to deal with the legacy of the 1970's and get the country back on a better growth path again. And it may even be possible to make more headway in the war against inflation if monetary policy does not have to fight the good fight all on its own."

For the short term, however, the outlook is considerably more restrained. The Conference Board of Canada forecasts only a relatively weak recovery in 1983, with GNP growth of 2.2 percent as against this year's 0.2 percent. Underlying this projection is the assumption that while interest rates may fall somewhat in the second half of this year, they will still remain high in 1983, with a continued dampening effect on the economy. Nor will the battle against inflation show overly impressive results. Following a double-digit increase (10.2 percent) this year, consumer prices are expected to rise by around 8 percent in 1983. This would reflect lower prices of imports from the United States (with further inroads by U.S. products into sensitive Canadian sectors), lower food prices, and adjustment of Canadian oil prices to more realistic levels. Wage settlements are expected to contribute little to the abatement of inflation.

The U.S. connection also emerges strongly in the views of several panelists. One notes succinctly: "The Canadian economy is strongly affected by developments in the U.S. economy, especially as regards the overall business cycle which is interconnected through U.S. export market and financial policies."

Another elaborates further: "In Canada, the depressed U.S. motor vehicle and housing sectors have precipitated a recession more severe than in the United States. Also contributing to the decline has been a Canadian energy policy that has discouraged investment in oil exploration and production activities, particularly on the part of foreign firms. In fact, foreign investment in general has been discouraged in an attempt to 'Canadianize' the ownerships of basic industries. Since foreign capital inflows have played such an important role in the Canadian economy in the past, the lack of these inflows

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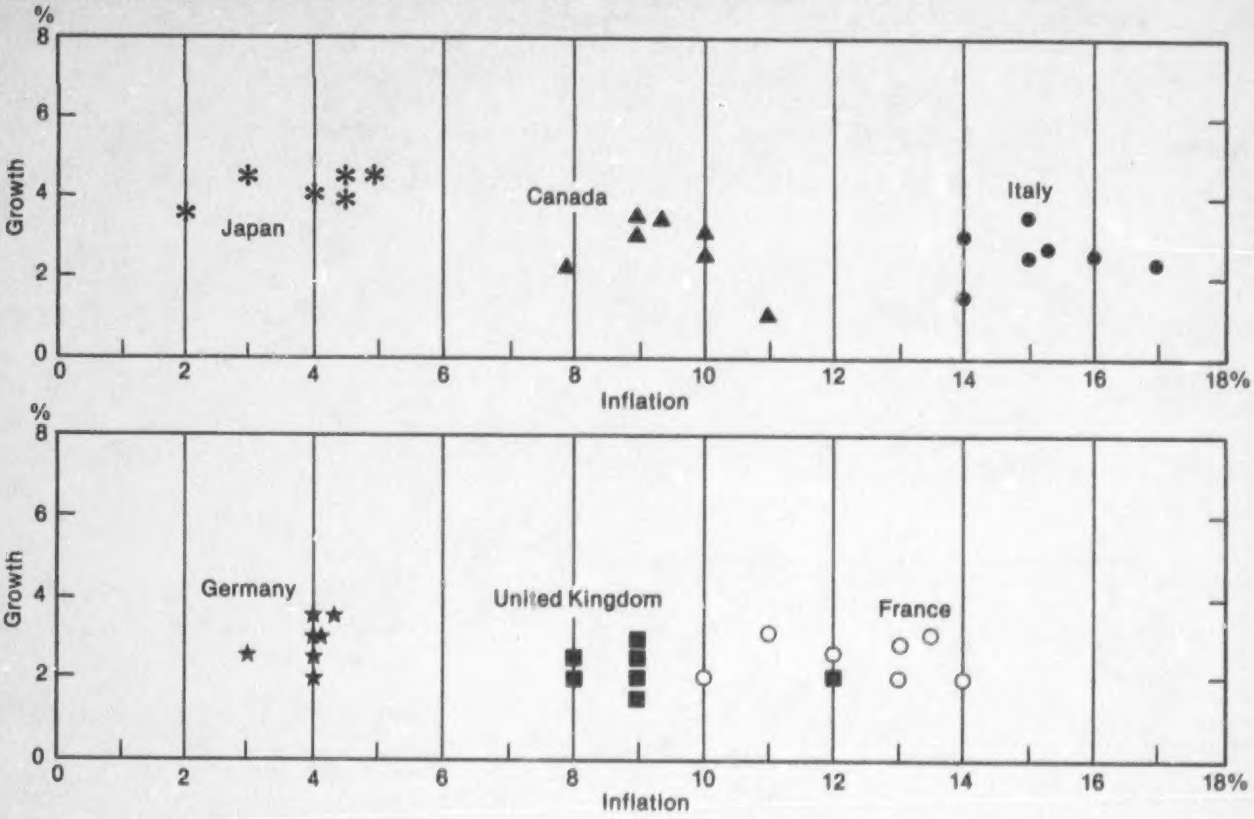
Table 2: The Corporate Outlook (1983 as compared to 1982))
Note: Each entry represents the 1983 forecast of an individual panelist.

	Growth			*Inflation*		
	Higher	*Same*¹	*Lower*	*Lower*	*Same*¹	*Higher*
United States	xxxxx xx			x	xxxxx	x
Canada	xxxxx xxx			xxxxx xx		x
Japan	xxxxx xxxx	x		x	xxxxx xxxx	
France	xxxx	xxxxx x		xxxxx x	xxxx	
Germany	xxxxx xxxxx			xxxxx xxx	xx	
Italy	xxxxx xxxx			xxxxx xx	xx	
United Kingdom	xxxxx xxxx	x		xxxxx xxx	x	x
Austria		xx		x	x	
Belgium	xxxxx xxx			xxxxx xxx		
Netherlands	xxxxx xxx	x		xxxx	xxxx	x
Spain	xxxx	x		xxxx	x	
Sweden	xxx			xx	x	
Switzerland	xxxx			xx	xx	
Argentina	xxxxx x			xxxx		xx
Australia	xx	xxxx	xx	xxx	xxxx	x
Brazil	xxxxx x	xx		xxxxx xxx		
Hong Kong	xxxx	xx		xxxxx	x	
Korea	xxxxx x			xxxx		xx
Mexico	xxxxx	xxxx		xxxxx x	xxx	
Singapore	xxxx			xxx	x	
South Africa		x		x		
Taiwan	xxx	x		xxxx		
Venezuela	xx	x			x	xx

Chart 2: Growth and Inflation in Six Countries: Forecasts for 1983



Observations represent forecasts for growth and inflation rates in 1983 submitted by individual panelists.

is expected to have an adverse effect on both internal economic performance and the value of the Canadian dollar through 1983."

The often-noted discrepancies between federal and provincial policies prompted these comments: "The fragmented nature of the Canadian market will present increasing problems for firms with operations scattered across the country. With a mere 10 percent of the work force subject to federal standards on labor, companies will observe a wide variety of provincial rules that will mean widening discrepancies in wage rates and other conditions from province to province. Labor costs will be 10 to 20 percent higher in Western Canada due to overheated growth in the region's resource-led economies."

Easily the most gloomy assessment of Canada's prospects comes from a panel member to whom the expected modest recovery in 1983 means that "by the end of next year, real GNP would be only about flat with its 1980 and 1981 levels. This is poor in itself, but is even worse in comparison to the United States." He continues:

"Even with a lowering of interest rates in the United States, upward pressure could remain on Canadian rates, given an estimated C$19.6 billion federal government budget deficit (about 5.5 percent of GNP) and the estimated 11 percent inflation rate. We would, therefore, expect little help from the business sector in pulling the economy out of recession. Corporate liquidity is dangerously low; profits declined some 44 percent in this year's first quarter from year-ago levels. With penuriously high interest rates (which helped interest payments soak up some 60 percent of corporate profits in the first quarter) and operating rates below 70 percent overall (and nearer 50 percent in some sectors), the Canadian businessman will be hard put to justify any capital spending that does not add immediately to cash flow. Nor would we expect the Canadian consumer to pick up the ball. Though apparently better able to do so than the businessmen (13 percent savings rate and real wage gains for the first time in several years), consumers have little or no confidence in the economy (or Ottawa's ability to manage it). Finally, with only weak recovery expected worldwide from severe recession, we would not expect the export markets to do much to spur the Canadian economy over the near term."

In *Japan*, pressures have been building up for the government to take measures to reflate the economy. Indeed, those who advocate a large budget deficit to stimulate economic activity argue that it would also serve to strengthen the yen, by putting upward pressure on domestic interest rates and thus narrowing the gap between Japanese and U.S. rates. Others contend that higher rates would simply raise the cost of running a deficit. The first group, the expansionists, led by the Economic Planning Agency and the Japan Economic Research Center, aim at boosting growth in the fiscal year ending in March, 1984, to over 4 percent. The other group, the budget balancers, identified largely with Japanese industry, insist that priority be given to spending cuts despite the continuing recession.

While these issues are being debated, Japan generally is expected to do reasonably well in 1983 compared with the other industrial countries. Although to one panelist the growth anticipated for next year looks "paltry compared with Japan's experience during the early 1970's, it will still be the highest GNP real growth rate of any OECD country." But, he notes, "to achieve even this forecast will not be an easy task, as the country can no longer rely upon the export sector providing most of the thrust. Export growth will probably be held to a single-digit number around 5 percent."

Another panel member writes:

> "A slower economic recovery may force the government to reexamine its basic strategy of seeking fiscal stability at the expense of growth. However, what the government can do to stimulate the economy is limited, since continued reliance on export growth must be avoided in view of the growing trade frictions. To increase public-works spending or reduce income taxes would lead to a widening of the budget deficit—and Suzuki has already announced his aim to balance the budget by fiscal 1984.
>
> "A third possible way to stimulate domestic growth—by lowering the interest rate—is a remote possibility because it is already low (the banking discount rate is at 5.5 percent), and a further cut could adversely affect the yen exchange rate.
>
> "With an average annual growth of 4.5 percent anticipated for the next five years, and a per capita income exceeding $8,000, the sixth most populous country is among the richest markets in the world. Opportunities for MNC's, however, will continue to be severely constricted by the fiercely competitive domestic market, high cost of market entry, and the government-industry determination to strengthen the position of Japanese companies against foreign firms in domestic markets."

Japan's dependence on exports, and hence on recovery of economic activity elsewhere, is stressed by other respondents. "The outlook for the Japanese economy remains hinged to the economic performance of the rest of the world. If the recoveries in the United States and Europe are weaker than expected, or if protectionist actions increase the barriers to Japanese exports, economic growth could be lower than the current forecast." "Assuming the anticipated acceleration of economic activity in other world economies, Japan's growth should increase to about 4 percent for 1983."

But no discussion of Japan can avoid the issue of the country's export competitiveness and the resulting large trade surplus. "The continuing large Japanese trade surpluses, especially with the United States, are intensifying the debate on trade issues. Yet the Japanese have still not made any significant moves to open their markets to imports."

"Trade friction with other countries continues to be a major issue and, in May, the government unveiled a second package of trade measures following the West's lukewarm response to the January reduction on nontariff barriers. The focus of attention is now on the liberalization of agricultural imports, a request of the U.S. government that is bitterly opposed by farm groups in Japan. As presently planned, tariffs on a variety of industrial goods will be reduced or eliminated by April, 1983, but only a few items will have their import quotas increased."

It is encouraging to find that these issues are recognized in Japan as well, and that broad-based solutions are at least being discussed among some of the "expansionists" (see box on page 10).

France's Economic and Finance Minister Jacques Delors reportedly declared last March—at a time when the franc was under attack—that "all the objective elements of the economy are satisfactory." Most observers would tend to disagree with that statement. Indeed, after wages were frozen and the franc was devalued last summer, *The Economist* was prompted to proclaim that "Socialist France's bold economic experiment has failed."

What are the facts? In adopting an austerity program, President Mitterand abandoned the high-spending policy that he had hoped would cope with unemployment. His only consolation is that unemployment in France grew more slowly over the year through last June than elsewhere in Europe. Consumer demand, which rose by 6 percent over a year earlier during the Socialists' first nine months in office, began to falter subsequently. While demand was initially buoyed by large wage increases for lower paid workers and hefty social-security increases, the wage freeze imposed last June spelled a drop in living standards for most French people.

Investment by the public sector has failed to increase in real terms, and the government's hopes that some of the newly nationalized companies could serve as "motors" for the entire economy have proven false. Private-sector investment likewise fell in both 1981 and this year. In-

Japan and the World Economy

"The maintenance of the growth vitality of the Japanese economy is also essential in relation to the revitalization of the world economy. The time when the 'success of a summit' was measured by the fact that 'Japan was not criticized' should have passed long ago. Thus, in order to find appropriate ways to get the world economy back on the right track, a more positive Japanese attitude is called for, i.e., an attitude based on the awareness that Japan is the second largest economy of the free world, and not one based on the hitherto prevailing 'victims' mentality' pointed out above. In that sense, to take the advocacy of a domestic demand expansion policy as an example, it does not mean that, if there is no severe external criticism, there is no need to carry it through. Also, Japan ought to have stood in line with Europe in sternly insisting on the rectification of the high U.S. interest rates. Of course, it might be unreasonable to expect any substantial results from a summit meeting alone. Thus, for the sake of the revitalization of the world economy, the pursuit of solutions to outstanding economic problems, such as rectification of high U.S. interest rates, prevention of protectionist measures in various countries, liberalization of the Japanese market, and expansion of domestic demand, must be an ongoing process—and not just topics to be considered on the occasion of summit meetings. The finding of solutions to these problems is not only important for the industrialized countries, but also vital to the surrounding developing countries which are presently confronted with the threat of stagnating economies."

Quarterly Forecast of Japan's Economy,
The Japan Economic Research Center, June, 1982.

deed, despite valiant government efforts to allay the fears of the business community, the government has encountered considerable resistance in securing the active cooperation of the French Employers' Association and, in addition, has seen a marked dropping off in the plans of foreign companies to invest or expand in France.

This mood is clearly shared by The Conference Board's panel. "The outlook for the French economy is now somewhat more subdued, as government policy is not expected to be as stimulative as thought earlier." "The government's aim is to reduce inflation to 10 percent at the end of 1982 and 8 percent for 1983. Economic growth is projected at 1.7 percent this year and 2.5 percent in 1983. No real improvement in the investment climate is expected until well into 1983."

A similar somber scenario is depicted by another panel member: "The Mitterand government will have to temper its avowed policies by economic reality in order to succeed. Initial impetus will come from consumption, but longer term growth hinges on an investment revival. Reduction of unemployment, together with the nationalizations, will prove costly. Heavy budget deficits and double-digit inflation are likely to persist." Unemployment will remain a problem, however: "The French labor force will continue to grow faster than those of the U.K. or Germany. Thus, the number of unemployed will keep rising over the next four years and the unemployment rate will still be high in 1990."

Another panel member summed up the French situation:

> "The contour of the projected recovery remains unchanged. It continues to be an example of classic Keynesian reflation in an otherwise monetarist world, with deficit spending by the government increasing consumers' incomes and encouraging their expenditures, while inflation persists and investment and trade suffer because of shrinking margins and eroding competitiveness.
>
> "We expect government spending to rise by a real 5 percent this year, with consumer expenditures increasing by nearly 3 percent after inflation. The rise in consumer spending will be made possible by a 1 percent increase in real wages, continuing transfer payments from the public sector, and a decline in the rate of saving as the economy continues to recover, reducing—at least at the margin—the fear of joblessness.
>
> "Nevertheless, the unemployment specter continues to hang over the economy despite the government's dedication to Keynesian economic programs. Shrinking markets, continued high inflation, and the mounting cost of work-sharing programs (e.g., the shorter workweek, longer vacations, etc.), all of which are supposed to be granted by industry with no compensating loss of pay, have reduced profits and eroded profitability. As a result, despite the expected recovery of demand and continued government attempts to encourage investment, private-sector expenditures on plant and equipment are still forecast to decline by a real 7 percent this year and to grow at a subpar 5 percent in 1983. At this rate, even by the end of next year, private capital spending will still be below its levels of 1980."

The economy of *Germany*, the wunderkind of the 1960's, has fallen on hard times. Terms such as "slow," "sluggish" and "doldrums" pervade the assessment of that country by The Conference Board's panel. The outlook is summarized neatly and succinctly by one panel member: "Having much more trouble than the economy 'should' have, given its basic strengths. High interest rates have been death to investment and the stubbornly strong U.S. dollar has kept inflation pressures on, leading to tighter policies. We see weakness (no growth) in mid-1983, following a strong fourth quarter in 1982 and first quarter in 1983. This keeps 1983 annual averages for GNP and industrial production down. Both government and private consumption are expected to grow more sluggishly than in the past. Germany will be focusing on reducing the public-sector deficit and making additional investments in capital to support exports and energy conservation."

These views are echoed by another panelist: "Germany's economy remains in the doldrums despite strong overseas demand for its automobiles. With unemployment up to 1.8 million, consumer buying is still weak and construction activity remains depressed. In traditional German style, business sentiment remains gloomy about both the short-term and longer term prospects. The recession's harvest of declining profits and rising bankruptcies is only part of the reason. There is also concern about Germany's export competitiveness, Japan's inroads into Germany's markets at home and abroad, and fear that unemployment will remain high for the rest of the decade."

The overriding importance of these developments is underscored by the fact that debate over the appropriate economic policy helped widen the gulf between the two partners in the 13-year-old ruling coalition, the Social Democrats and the Free Democrats. Eventually, the already fragile consensus on economic policymaking once shared by the two parties broke in mid-September, leading to the collapse of the government of Chancellor Helmut Schmidt. While *The Wall Street Journal* ventured the guess that the new government of Christian Democrats and Free Democrats was likely "to bring more change in accent and rhetoric than substance," *The New York Times* felt that the new leadership would lead to "broad shifts in both the tone and content of Bonn's economic policy." Indeed, in the long-term strategy proposed by Dr. Lambsdorff, the Free Democrat Minister for Economic Affairs—with its emphasis on stimulating investment, creating jobs, and trimming government spending—a British observer has seen "a West German version of Thatcherism."

Several panelists, although writing during the Summer, foresaw such a change and commented accordingly. "German voters are not likely to turn—at least, not yet—to the Christian Democrats. But if the government fails to check the now-rising unemployment rate, the opposition may look more attractive to voters." "A shift of control of the government to the Christian Democratic Party need not necessarily be detrimental to the economy, but uncertainties of the ongoing power struggle add complications to the difficult task of restoring the German economy's forward momentum." "A CDU government, either alone or in partnership with the FDP, would be warmly welcomed by the business community, even though the present government is not antibusiness."

Economic conditions outside Germany were seen as determining German business activity over the short run. "Exports continue to be the mainstay of the German economy. Because the Deutsche mark's recovery is likely to be gradual, and because Germany's inflation rate is one of the lowest in the OECD, German products should remain competitive in world markets."

"Low inflation and continued gains in productivity will be positive factors and domestic manufacturers are likely to shift increasingly toward export markets to compensate for lackluster domestic sales. By the end of the decade, this trend should make Germany even more dependent upon foreign markets than it is today."

Yet, even if business activity picks up in 1983, reflecting recovery in the United States and an improvement in world trade, the growth rate projected for Germany "looks sluggish compared with previous business cycles, reflecting a subnormal world recovery and a shift toward greater restraint by both government and consumers." Indeed, even under the best of circumstances: "Over the next five years, growth is forecast to average 2.5 percent—a rate which is below that achieved from 1975 to 1980. Growth in the consumer and government sectors will be limited, while the export and investment sectors will outperform the overall economy." Meanwhile, in October the German Economics Ministry came out with a revised forecast, of zero growth, for 1983 as a whole.

Italy continues to amaze most observers. An Italian journalist noted not long ago: "The Italian economy always defies straightforward analysis, but rarely have its apparent contradictions been so marked as at present. On the one hand, there is no lack of evidence of genuine economic vitality and increased productive capacity, but matching this are just as many examples of inefficiency and even crisis." That view is echoed by a panel member: "Very mixed signals, as always, coming out of Italy. Underlying vitality continues to be crimped by government attempts to get control of deficits and inflation." Italy has even been called (by *The Economist*) "in many respects the most advanced of the developing countries (although Italians would wince at the description)."

It tends to be forgotten too often that, in the second half of the 1970's, Italy—which did not start large-scale industrialization until the 1950's—was the fastest growing of the major European economies, even though it has to import nearly all of its energy. Italy has, in fact, been catching up fast; and it is estimated that, in 1982, its per capita GNP, at around $7,300, will come close to that of the United Kingdom ($7,750). The country is expected to continue to register one of the best growth records in Europe over the next five years.

In any discussion of the Italian situation, two aspects inevitably come to the fore. The first is the alleged instability of the country's political system. Yet, Italy has been ruled by the same major party, the Christian Democrats—in coalition with a number of the smaller ones—since the end of World War II. What periodically are billed as government crises have been characterized as "the jostlings for power of ambitious brokers of patronage in these parties; they would be called cabinet reshuffles elsewhere." This is recognized by one panelist:

"Despite outward appearances, the political system is quite stable. The individuals change, but the ruling party has remained in power since the mid-1940's and, through compromises, has found workable solutions which permit the country to function."

The second issue concerns the indexation of wages, the famous *scala mobile,* under which wage earners have been compensated periodically for 70 percent of price rises. By offering virtually automatic protection against price increases every three months, the *scala* had ensured that inflation remained a built-in feature of the Italian economy. At the time of last year's survey, the Italian government had proposed replacing the system by adjustments based on a "target" set for the annual increase in the cost of living. In June, 1982, the country's employers' association, Confindustria, proposed termination of the agreement as of January 31, 1983.

Comments one panelist: "High unemployment has weakened labor's bargaining power; the timing of Confindustria's decision to revoke the *scala mobile* is, therefore, quite opportunistic. The employers' federation has, however, proposed a seven-point pact to replace the *scala mobile* which includes, among other things, partial inflation adjustments every four to six months instead of the current three months. It is possible that this proposal, in combination with the government's willingness to appease labor in other ways and labor's own weak bargaining position at present, could finally bring significant changes in wage indexation before year-end."

Another sees Italian unions as "likely to be more flexible; union ideology now concedes the need to enhance productivity." Still another writes: "There is a growing consensus among all groups—government, unions and industry management—that inflation rates must be lowered. Since the peak rate of 25 percent reached at the end of 1979, inflation rates are likely to remain around 15 percent per year, well above the levels prevailing in the economies of Italy's main trading partners."

In general, the panel believes, attitudes toward foreign investment will remain positive. "None of the major political parties, including the Communists, favor nationalization. On the contrary, the near future will bring more denationalizations. Corporate taxes will also continue to be low. Incentives will be available to attract foreign capital to the southern *mezzogiorno* region."

This section of the report, on the *United Kingdom,* was drafted on the day last September on which the British public had to do without national morning newspapers, all television channels went blank for part of the evening, buses were not running for a few hours, no coal was being dug, and civil servants were downing their pens. This "day of action," organized by the union leadership in support of the health and hospital workers' 12 percent wage claim, came just as British unemployment had hit 12.7 percent. With slightly over three million unemployed, September was thus the third consecutive month the number of jobless exceeded that registered during the depression of the 1930's.

In a way, these two developments show both the general dissatisfaction with, and the failure of, the present government's economic policies. Indeed, opinion remains quite divided over the near-term economic outlook. Despite the government's brave assurances that recovery is under way, the business community has remained decidedly gloomy. Thus, the Midland Bank noted recently that "the seeds of recovery in the U.K. economy which seemed to be germinating in the autumn [of 1981] have subsequently shown few signs of growth," and that the general picture was that of an economy "which seems to be doing little better than bump along the bottom."

The Conference Board's panel seemed to be leaning toward a stance of cautious optimism, although it saw the British economic position as "far from satisfactory." Here is a sprinkling of views:

- "Some sort of trough has probably been reached, but it is hard to be too optimistic. The United Kingdom has stayed down for so long, but still convincing evidence of any upsurge is missing."
- "Economic recovery has been weak and hesitant in the United Kingdom but it remains, nonetheless, on track."
- "After two years of precipitous decline, the economy reached its trough in mid-1981 and now seems to be at the start of a mild upturn. Modest real GNP growth averaging 2 percent per year is expected over the next five years."

Any such upturn, it is generally agreed, hinges on more expansionary measures that, in turn, may well be dictated by the political timetable. "As the next general election has to be held before May, 1984, the easing of Prime Minister Thatcher's tight-fisted economic policies seems probable next year. Even a group of her own Tory members of Parliament are advocating the introduction of stimulative measures this Fall."

"With the next general election only two years away, the Thatcher government will grow increasingly aware of the need to secure victory through a reflationary package early in 1983."

Such a package—which would constitute "acknowledgment of reality"—would have some interesting implications. "In 1983-1984, inflation is expected to rise again as economic policies become more stimulative. The next government, in the event of escalating prices, is likely to impose some sort of wage-control to reduce the inflation rate toward the target level of 7 to 8 percent. Growth will reach a cyclical peak of about 2.5 percent in 1983-1984, but wage-control policies will restrict the economy to low positive growth rates thereafter."

In light of these developments, a sustained strengthening of sterling is seen as unlikely, "given the decline in oil prices, poor comparative real interest rates, and concerns that an electoral defeat of the Thatcher government would reopen the door to exchange controls." However, "import controls and exit from the European Community are unlikely unless Labour wins an absolute majority."

Meanwhile, at the end of October, *The Economist's* weekly barometer was pointing to "change" and the overall outlook continued mixed (see box).

Barometer

Pay is now being squeezed, along with prices. Average earnings in August were 7.8% up on a year earlier, the smallest annual rise for five years. That has not stopped retail sales from rising briskly—in real terms by 2½ % in the July-September quarter, up 3% on the same period in 1981.

Companies also boosted their spending, by 4% in nominal terms in the second quarter, thanks to more investment and less destocking. But their income fell, pushing them into a large (£1.3 billion) deficit for the first half of this year, after a £1.8 billion surplus in 1981. The index of leading economic indicators rose 2.3% in September.

Source: *The Economist*, October 23, 1982.

Other Countries

This section presents selected comments by panelists on eight additional countries.

"*Argentina's* main economic problems in the next five years stem from the extremely depressed economic conditions existing before the Falklands conflict. To these, one must now add higher inflation, a weaker balance of payments, and the possible need to restructure the foreign debt. Stiffer restrictions on foreign investment over the five-year period are likely."

"Against the background of hardly any growth in the OECD countries this year, it is difficult to see any upturn ahead for the *Australian* economy, particularly in view of the divergent trend in inflation between Australia and its major trading partners. Due to excessive wage demands, high interest rates, increased public-service charges, and higher domestic oil prices, Australia's accelerating consumer price index is out of line with the disinflationary trend in most industralized countries."

"The longer term outlook for *Brazil* hinges heavily on the government's ability to keep the balance of payments in order, and yet manage a delicate growth and inflation situation. The country has succeeded before in directing the economy to the area it wanted. There is good reason to believe it will again."

"Most of *Brazilian* capital is going toward servicing the public debt. There simply is not any capital available for development projects—except those projects that will generate badly needed export earnings. The size of Brazil's public debt will be a drain on the Brazilian economy through the 1980's and likely into the 1990's."

"*Hong Kong* is expected to maintain high economic growth in the coming five years. What Hong Kong lacks in natural resources, it makes up for in export competitiveness. Its skilled and efficient labor force, increasing economic ties with China, and good infrastructural facilities confirm that Hong Kong's high growth momentum will continue."

"*Hong Kong* is slow. The lease question with China is greatly slowing construction. Cost and space problems are cutting down on manufacturing. The bloom is off the rose. People are moving to China and investments to Singapore."

"*Korea* is in a stage of transforming from a light-industry to a heavy-industry oriented economy. Fundamental problems like the lack of technology and management skills, streamlining the overinvested petrochemical industry, and the inability to successfully develop indigenous and complementary industries are hurdles that will check Korea's economic growth over the medium term. Restrictive policies and low wage increases have indeed helped to bring inflation under control. There is wide consensus that the rate of price increases will be kept down, based in part on the Korean government's strong determination and the variety of anti-inflationary measures available."

"*Mexico* finds itself in a period of consolidation with growth rates for this year and next projected to be only in the 3 to 3½ percent range. In contrast, inflation is forecast to run in the 45 to 50 percent range, an aftermath of the recent devaluation and mandated wage increases for lower income workers."

"Without a strengthening oil outlook by 1985, the possibility does exist for *Mexico* to be plunged into a prolonged period of little or no growth. The political consequences would be extremely serious: widespread social unrest and a possible hardline response from the government toward business and labor."

"The outlook for *South Africa's* economy and for the economic policies of its government hinges largely upon future trends in the price of gold. We look for several more months of intermittently downward pressure on the precious metal, with adverse effects on production, the external accounts, and the currency, resulting in additional government efforts to check demand and inflation. Moreover, we expect a generally lackluster price performance for gold even in 1983 as world inflation remains within bounds. However, the metal's price is likely to begin rising by mid-1983, as the world economy moves into a more robust recovery phase."

"The *Taiwanese* government is projecting a growth rate of 8 percent in 1982-1985. The achievement of these targets depends on: first, the world's economic health; second, Taiwan's ability to shift away from labor-intensive sectors to technology-intensive industries; and, third, its ability to change its domestic cost structure to withstand stiff competition from Korea and lower wage countries in Southeast Asia. In the short run, we believe that the 8 percent target for 1983 is overly optimistic, even though the projection is conservative compared with the historical 9 percent average annual growth in 1952-1980. Generally poor economic conditions will dampen hopes for any high export-led growth. Investment may increase somewhat and add to economic growth as a result of the government incentive program. Over the medium term, Taiwan may continue to grow at respectable rates of around 7 percent as a result of improvement in technology. Trade will probably be the chief engine for growth, assuming that Taiwan is politically capable of gaining access to foreign markets."

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by Audrey Freedman et al

The Conference Board

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THE CONFERENCE BOARD'S 1983 LABOR OUTLOOK PANEL

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Chairman

The Conference Board's annual session on the labor outlook took place on November 4, 1982. Panel members discussed the current economic situation, compensation trends, labor relations, and political events. This process provided the predictions for 1983. The individual views quoted were submitted in writing.

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LABOR OUTLOOK, 1983

Recession's Effects in 1983

The Conference Board's Labor Outlook panel expects unemployment to remain high—close to current levels—throughout 1983 (see Table 1). As a consequence of the recession and falling prices, it foresees some further reduction in wage increases. In 1983, the panel thinks that consumer price inflation will increase somewhat, to about 6 percent. There will be little payroll growth in any 1983 business recovery, according to the panel, which was concerned that the 11½ million currently unemployed may never be fully reabsorbed into the work force. Consequently, the panel members raised proposals for public works programs (financed by reduction in defense spending, if need be), and government-backed industrial development bonds to raise capital for small business. There was also discussion of national economic planning, as opposed to industrial and employment "programs." (See page 9.)

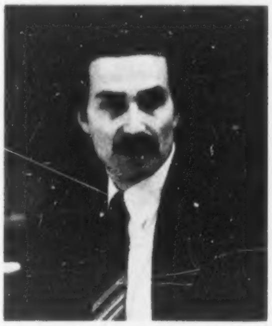
Table 1: Forecasts for 1983 by The Conference Board's Labor Outlook Panel

	Median (Percent)	*Range (Percentages)*
Unemployment average during 1983	9.7	8.9 to 10.8
First quarter	9.9	9.7 to 10.8
Second quarter	9.8	9.2 to 11
Third quarter	9.7	8.5 to 10.7
Fourth quarter	9.4	8.2 to 10.7
Rate of inflation (average increase in Consumer Price Index)	6	5 to 7
First-year wage and benefit increases in major union contracts	6.9	6 to 7.5
Overall increase in average hourly earnings, January, 1983 thru December, 1983	6	3.5 to 9
Increase in labor costs per unit of output in manufacturing	3.5	2 to 5

During 1983, any recovery in production levels, accomplished by a much-thinned work force, will yield solid gains in output per worker hour. Following this line of reasoning, the panel concludes that unit labor cost increases in manufacturing will average 3.5 percent next year—about half the current rate of increase.

Price and Wage Inflation Sharply Down

Falling sales throughout 1982 have cut price inflation in half. Wage inflation has fallen even further. In the first three quarters of 1981, first-year increases in major collective bargaining settlements averaged 11.5 percent. This abated to 3.8 percent by Fall, 1982. Some two-fifths of the workers covered by new 1982 bargains received no wage increase, greatly lowering the weighted average. When their "zero" bargains are removed, the average first-year increase in bargains concluded from January through September, 1982, is 7.1 percent (note the similar rate of wage increase in Chart 1). State and local government employees bargained average increases of 8.1 percent.



DAVID LEWIN
Professor of Business
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David Lewin suggested that industry experience varies, even within a very serious recession:

> "This is a case in which the disaggregated data tell a clear story. Unionized workers who received small or no (zero) wage increases in 1982 were employed in firms and industries that faced depression-type, if not bankruptcy-threatening, conditions. The economic survival of many of these firms and industries was (and remains) in question and fundamentally affected wage bargains in 1982. The transportation, automotive, rubber and farm equipment firms are the best known of these facing crisis conditions; but many smaller, lesser known, often supplier firms are experiencing the same circumstances. In contrast, a

minority of firms and industries did not face crisis conditions in 1982. Indeed, some firms experienced rapid growth and high profitability—and their unionized workers received more 'normal' rates of pay increase. From this experience it can be seen that collective- bargaining settlements provide another example of the 'fallacy of averages.'''

ROBERT NEYLAN
Vice President
Employee Relations
Gould Inc.
Rolling Meadows, Illinois

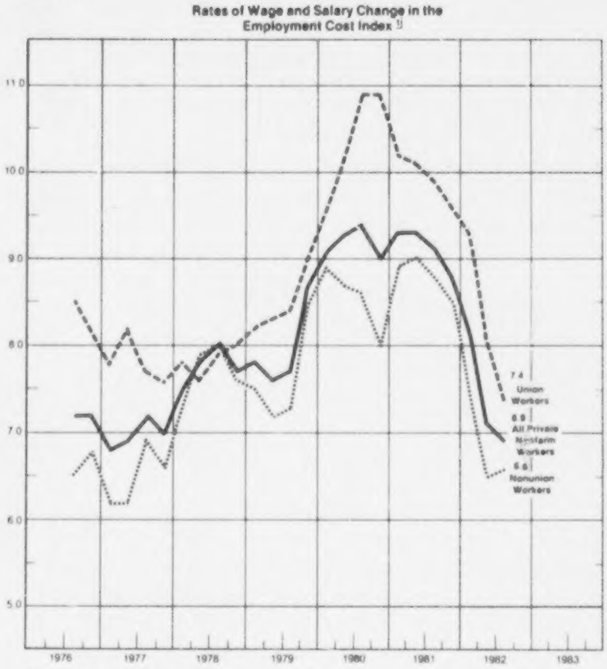
The wage leaders of the 1970's are, in many cases, the same parties who now are negotiating cost-of-living (COLA) clause "suspensions," wage freezes, reductions in paid time not worked. Robert Neylan said:

> "This interesting development is a function of recession, but also has implications for the future. I suggest that the 'pattern' practice, which so much dominated bargaining during the 1960's and into the 1970's, has suffered yet another blow. Employers and unions, too, are increasingly conscious of the impact of a settlement on 'their' jobs, rather than concentrating on keeping up with the Jones. The auto pattern is dead for the moment at least, although in the media Chrysler workers still refer to the fact that GM employees are ahead. Profit sharing and job guarantees are becoming more common, if not yet commonplace, and the health of individual businesses is becoming the focus of bargaining. If we postulate a slow recovery from recession, these trends will become more pronounced, although the notion of 'follow the leader' in heavy industry will die hard. Increase patterns escalated by price inflation, rather than the employer's balance sheet, will be tested as more employers (and employees as well) recognize that the time has come to bury cost-of-living clauses."

Some insight on the auto bargain—and its leadership role—was provided by Peter Pestillo:

> "We sought and achieved labor-cost moderation in the latest agreement. The Japanese manufacturers have a labor-cost advantage derived from compensation costs half ours. We will narrow—though not close—this gap during the life of this agreement.
>
> "I think it is to the great credit of our senior management that no one ever suggested the quick fix of deep wage cuts. The company has been around for almost 80 years now, and we have chosen a course that might be less flashy but more fulfilling. We have chosen to begin a process *leading to* a cure of our noncompetitiveness, not just to provide some quick, and perhaps temporary, relief from it. We bet that deep wage cuts would not survive adversity.

Chart 1



[1] Rates of Change cover 12 months ending in the quarter indicated

Sources: Bureau of Labor Statistics, The Conference Board

> "There will be no general wage increases under this agreement, and paid time off was dramatically reduced. COLA payments were suspended for 18 months, though they must be revived (but not repaid) before the agreement expires. We introduced profit sharing as a means of giving our employees a direct stake in our recovery. We hope over time to extend this move toward profit sharing and away from COLA as a means of permitting the company to retain money when it is needed more. But, as I said, we did not feel we could fix everything at once.
>
> "We provided job or wage guarantees to senior workers

PETER J. PESTILLO
Vice President—Labor Relations
Ford Motor Company
Dearborn, Michigan

and agreed to experiment with lifetime employment. In doing so, we knowingly made labor cost less variable. We changed the employment equation toward the Japanese—or European—mode, a system with which we are fully familiar. We did so out of a conscious intention to make a commitment to our people that we expect to be reciprocated. There are cost safeguards on this job security; and if we can manage our business well, this need not be an expensive benefit. We have made significant progress locally in achieving work-rule modifications."

DONALD EPHLIN
Vice President
United Automobile, Aerospace
and Agricultural
Implement Workers
(AFL-CIO)

Don Ephlin, the union officer who negotiated that agreement with Ford, made it clear that wage cuts will not become a pattern:

> "We have proceeded strictly on a case-by-case basis, all too aware that the times are ripe for many companies simply to want to climb on the 'relief bandwagon.' At the same time, we look for 'quid pro quos': lifetime-income guarantees, profit-sharing plans, financial disclosure, and 'equality of sacrifice' clauses among management personnel."

Dan Mitchell's description of the occasions on which concessions are useful suggests that union resistance (up to the point of actual payroll reductions) is rational:

> "Certain industries and employers are in dire straits and can credibly ask unions for wage concessions to conserve jobs. When the job security of senior union members is threatened by plant closings, mass layoffs, or bankruptcy, the union political mechanism is obviously going to be more receptive to some type of concession.
>
> "However, while many employers appear to have asked for concessions during the past year, not all could document that jobs could be saved. For firms that are not in severe economic distress, even a substantial decrease in wages will have only a modest effect on costs and prices. A firm in which labor accounts directly for about 20 to 25 percent of total costs—and which receives a wage cut of 10 percent—could reduce prices by only 2 to 2.5 percent as a result. Such a modest reduction would probably not result in much added demand for the firm's product. Thus, the wage cut would not have much effect on employment or job security.

DANIEL J. B. MITCHELL
Director, Institute of Industrial
Relations
University of California
Los Angeles, California

> "Wage concessions have a job-saving effect *only* when the firm or plant is near the shutdown point. Under those circumstances, even a modest saving in labor cost can be the difference between operating or not operating."

Even with the variation among major manufacturing industries, a reduction in wage inflation is clearly taking place. Among service industries, however, the extent of response to recession is less obvious. Dan Mitchell suggests that there is general reduction in the rate of wage increase here, as well:

> "There are no sectors whose wage decisions are permanently immune from the forces that have slowed the average rate of wage increase. Price inflation is a major determinant of wage inflation. Since price inflation has slowed, wages throughout the economy will eventually react.
>
> "The service sector has not been the scene of major wage-concession negotiations because (1) many parts of that sector are heavily nonunion, and (2) the sector is less sensitive to business-cycle pressures. From August, 1981, to August, 1982, the hourly earnings index for 'services' rose 7.5 percent. But from August, 1980, to August, 1981, the figure was 10 percent.
>
> "Nonunion employers in that sector are being less generous with discretionary pay adjustments under merit plans. Actual pay increases can be slowed by employers through a tightening of internal policies with regard to pay adjustments that do not show up in official pay schedules."

Some service industries are growing even during recession, and some are not facing competitors with lower costs of production, observed Don Ephlin:

> "The severity of the recession's impact has been decidedly milder in services than in other industries, but not all workers in the industry have been spared. In education, for example, there have been drastic cuts at all levels, the product of declining enrollments and shortage of funds.
>
> "The largest industries within services—health-care services and business services—have kept on adding to their payrolls throughout the recession. Driven by high interest rates and overstocking, many businesses have continued

the computerization of their accounting and inventory systems to cut down on financial costs.

"One of the reasons for higher wage increases is the virtual insulation of most service industries—at least so far—from foreign competition."

DONALD Y. CLEM
Chairman of the Board
and Chief Executive Officer
McConway & Torley Corporation
Pittsburgh, Pennsylvania

In agreement, Donald Clem said:

> "Service industries are still growing and are not really in a recession as compared with the manufacturing sector of our economy and, therefore, there has not been the need to respond with reduced wage improvements. There are some competitive forces at work, but I do not expect that there will be a sharp plunge in wage increases in the service industries as has occurred in almost all other industries.
>
> "Hotels and other personal services ultimately will feel the impact of the recession through the tighter controls on corporate-expensed dollars. For example, our sales and executive personnel now use their automobiles on trips of less than 500 miles, and usually stay at a motel outside of the major city rather than in an expensive downtown hotel.
>
> "Advertising should be a growth industry in periods of recession, since there is a stepped-up sales effort during these depressed times. However, that is an easy dollar to cut and, I suspect, they reduce advertising expenditures in the smaller corporations even though they should be doing the opposite.
>
> "There will certainly be more strikes in the public education system. Local communities are up in arms over the continued pressures to increase local taxes—either income or property—to pay for inflationary settlements. I believe it will be difficult for the union teachers to continue to get contract settlements above the inflation level once we have stabilized lower inflation over an extended period of time."

1982 Affects 1983

Wage increases in 1983, the panel agreed, will remain at their 1982 levels. In major union negotiations, the average increase is expected to be just under 7 percent. There was close agreement among panel members on this point: Their estimates ranged only from 6 to 7.5 percent. (See Table 1.)

Using a broader indicator of wage change—average hourly earnings gains—the panel predicted an increase of 6 percent during 1983. There was more divergence among panel members on this point, however. This suggests that some feel that the nonunion work force will continue to be affected by recession and a labor market full of job seekers in every occupation and area. Only one panel member expects wage increases to resume their pre-recession growth.

The year-long question of 1982: "What will be done about steel wages?" will be answered in the next few months. Pressure on the parties to break the automatic wage pattern has never been greater, but negotiating failures have so far prevented an early opening of the major steel contract. Before it terminates in Summer, 1983, a change in wage terms seems likely. However, the panel was not completely confident that a strike is out of the question. Mr. Neylan suggested that several conditions are now present that parallel those of 1959—just before the last big steel strike:

> "It is interesting to compare the response of two industries, steel and auto, to essentially the same problems. How does it happen that the auto workers' leadership can sell its militant membership on the notion of accommodation while the steel workers' leadership, taking a moderate tack, fails? I believe that the answer is to be found in the history of steel bargaining and in the response of management to industry problems. *The leadership of the steel union has followed management's lead in ignoring problems that have been growing for years, problems related to pricing, quality and product mix.* The easiest course for management was to pour out unsophisticated product during the 1960's to cash in on the construction boom. Wages, salaries, benefits and dividends were raised as if there were no tomorrow. Foreign competition was condemned as 'dumping' by both sides in an effort to preserve the status quo. The nine-year no-strike agreement was a response calculated to dampen foreign competition, but it also served to limit the bargaining to immediate problems and buried the long-range realities.
>
> "*The one reality that the industry has never addressed is the loss of its monopoly in the American market.* True, dumping does occur, but the more efficient foreign producers do not have to dump to undercut U.S. companies in this marketplace. The steelworkers as individuals, I am sure, recognize what is happening today. The industry is playing hardball in an effort to achieve concessions that will reduce cost, shore up its financial condition, and provide capital for investment and modernization. The other side of the coin, some form of guarantee that jobs will not disappear anyway, does not appear to be part of the industry program—and that is what the workers want. Any employee of U.S. Steel has to be painfully conscious of the fact that the company has reinsured part of its wager by investing in oil. While Chrysler divested itself of peripheral operations (air conditioning, tanks, leasing), admittedly under different circumstances, 'big' steel is scrambling to put distance between itself and its roots.
>
> "We may be looking at 1959 all over again. Recall that in 1958-1959 the industry was operating at capacity levels

On "Concessions"

"The untold story, unreflected in any statistics, are the concessions being squeezed out by companies through premature reopening of negotiations. In many industries, management has caught 'concession fever'. And that includes just about every company that deals with a union—even the profitable ones. In industries where layoffs have occurred, the workers are naturally responsive to company claims that wage concessions must be given if the company is to compete effectively. If this does not work, the threat of plant closure often does. We have tried to limit these take-aways by instructing our locals to demand specific proofs before talking about concessions.

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> comparable to the present. The companies gambled, with a high stockpile of finished goods, that they could recoup some of the concessions (principally work rules) given away over the years. If the industry miscalculates again, the confrontation will be equally devastating and may well answer the question whether we are to have a viable domestic steel industry."

Returning to his thought that only under the real threat of plant shutdown are concessions readily (and justifiably) granted, Daniel Mitchell said:

> "Steel bargaining is highly centralized, with multiemployer bargaining in basic steel since the 1950's. Thus it may be difficult for workers in local, marginal plants to have a substantial influence on national policy. For example, concessions negotiated locally at the Kaiser Steel plant in the Los Angeles area were vetoed by the national union. It can always be argued that local concessions would trigger across-the-board concessions, affecting plants not facing imminent shutdown.
>
> "With regard to the failure to open the current contract this past Summer, the parties focused too heavily on the August 1 deadline. While it is sometimes useful to have deadlines, the fact that a pay increase would be effective on that date was not sufficient rationale for a deadline. It is evident that management is looking for a long-term change in wage trends in the steel industry. Such an understanding, if it can be reached at all, would require that management put forward a credible long-term argument to the Steelworkers with convincing evidence for the effects on job security. In turn, the union would need considerable time to sell such a proposition to its membership."

Donald Clem describes some of the negotiating problems faced by management:

> "This will be the first contract negotiated in many years that is not under the 'no strike' agreement. The 'no strike' agreement was probably the worst thing that ever happened in labor negotiations in the steel industry. The guarantee of a quarterly cost-of-living increase and a minimum of an additional 3 percent annually prevented the steel companies from making adjustments in their labor rates over almost a decade.
>
> "Now there is a mass effort on the part of the steel companies to admit their errors in labor settlements of the past and to try to get the worker to identify with the competitive situation. This is very difficult for the steel companies to accomplish, mainly because the worker will ask: 'If we make concessions, what guarantee do we have of job security in the world market for steel? How many new jobs will be added if we make concessions?' The answer to this might just have to be: 'No more guarantees than you have had in the past—there are probably going to be fewer jobs in the immediate future.'
>
> "In our experience, it has been very difficult to get the worker to relate to domestic competition, let alone foreign competition. The U.S. steelworker cannot grasp the importance of productivity and the labor rate in maintaining job security.
>
> "We have had a unique experience. We purchased another foundry and modernized it to become the most advanced steel company producing our product in the country. We also obtained a superior work force, with a different union and a different contract period. The two plants can both produce the same product. Each looks upon the other as a competitor. During the current recession it was not too difficult to get concessions at the higher cost shop, and to obtain substantial productivity improvements at both plants. In addition, at the lower cost plant, we recently were able to achieve a 3½-year contract at an annual increase of less than 5 percent in wages and fringes. If the steel companies can somehow bring this competitive awareness to the majority of the employees, they should reach a settlement without a prolonged strike."

David Lewin expects some strike activity—but perhaps not an industrywide strike. Perhaps the term "industrywide," applied to bargaining, patterning or any other union-management arrangement, will never apply to steel again:

> "Even if steel negotiations commence and continue up to the expiration of major contracts in mid-1983, a consensus about concessions, givebacks or modest settlements seems unlikely to be reached easily. In fact, formal strikes or wildcat strikes are likely to take place in steel before new settlements are reached. What this may also suggest is further dilution of multiemployer bargaining in steel and increased emphasis on wage individuation. Thus, bargaining in steel may soon come full circle from the nature and structure of bargaining that developed in this industry following the prolonged steel strike in 1959."

Price Inflation in 1983

The Conference Board's Labor Outlook panel expects consumer price inflation to be about 6 percent next year, slightly higher than it was running in the third quarter of 1982. There was agreement in the group, with a narrow range of estimates from 5 to 7 percent (see Table 1). Don Ephlin attributed the quiescence of inflation to excess capacity throughout the economy:

> "Along with record unemployment rates and bankruptcy rates matching those of the Great Depression, the 1981-1982 recession has accomplished a decline in the rate of inflation. However, I must repeat that high unemployment and recession represent a scatter-gun approach to an inflation problem that is, to a substantial extent, of a sectoral nature. In other words, recession is not a *durable* medicine for inflation—unless we are willing to settle for very slow growth for an indefinite period.
>
> "In the short term there need not be immediate resurgence of inflation as the economy turns up, because many sectors in the economy, autos among them, are poised for robust increases in productivity. Obviously, management decisions vis-a-vis profit margins will be very important to the inflation outlook."

Robert Neylan and Daniel Mitchell are in agreement that inflation will remain low for several years. Mitchell explains:

> "In 1980, the underlying rate of inflation was about 10 percent. By the middle of 1982, the underlying rate was about 6 percent. This drop in the underlying rate was achieved by a period of economic slack that began in 1979, and eventually resulted in record unemployment rates. It took a heap of recession, in short, to cut the rate of inflation by 4 percent in a period of over two years.
>
> "The inertia of inflation has been long noted by empirically oriented economists. But inertia can be beneficial under some circumstances: Once inflation is dampened, it will reignite only slowly.
>
> "Given inflation inertia, there is room for a recovery to get under way without a rapid rise in prices and wages. Recovery might proceed for some time without producing strong price acceleration, although eventually, continued expansion will produce increased inflation.
>
> "The record on inflation forecasting has not been especially good, and the economy is currently operating in a range outside the usual run of observations with regard to unemployment. The UCLA Business Forecast predicts an inflation trough of about 5 percent in 1983, with some acceleration thereafter. Wage inflation is projected to reach a trough of a little over 6 percent in 1983, with accelerating tendencies thereafter. Other forecasts suggest that both wage and price inflation might be somewhat higher. If one takes long-term government bond yields as containing an inflation-expectation component, at this writing the market is projecting an eventual inflation rate in the 8 percent range."

Unit labor costs—a sharply rising element in the inflationary decade of the 1970's—will increase only slightly during 1983. The panel expects a combination of slowly rising wages and a substantial increase in productivity to raise manufacturing unit labor costs only 3.5 percent next year. Every estimate here (ranging from 2 to 5 percent) was below the current rate of increase of 7.2 percent (see Table 1). This auspicious shift—wages down, productivity up—is the chief optimistic forecast that the panel made.

Unemployment Will Remain Seriously High

More discussion was devoted to unemployment than to any other subject. The panel members are not confident that recovery will reduce current high levels of unemployment to acceptable rates. A major subject of discussion was the form that government action might take—not the wisdom or need for intervention. Daniel Mitchell said: "A robust economic recovery would bring down the unemployment rate. The notion that the rate is permanently stuck at its current high levels due to structural changes is simply not correct." Nevertheless, the time devoted to considering how an active government policy might be designed suggested that none of the panel members see that reduction occurring.

The panel predicts an overall unemployment rate of 9.7 percent for 1983, with a slight downward trend throughout the year (see Table 1). One day after the meeting, the unemployment rate reached 10.4 percent. As can be seen from the range of their estimates, some expect no improvement throughout the four quarters of 1983.

One panel member, Robert Neylan, appeared to be relatively sanguine about employment recovery:

> "In considering what becomes of the unemployed, it is worth reviewing the unemployment situation from a broad perspective. First we went into the recession with unemployment at about 7 percent to 7.5 percent, depending on the date you pick. Unemployment has been steadily rising over the past 20 years: It averaged 5.1 percent in the period 1955-1960 and 7.1 percent in the years between 1975 and 1980. The recession-induced increase in unemployment amounts to about 2.9 percent, matching the increase attributable to every prior recession since World War II. I am not minimizing the seriousness of the unemployment picture, but I do suggest that in a real sense we are no worse off than we have been in past recessions.
>
> "We were unfortunate enough to have started into recession at higher unemployment levels than we have had to deal with previously. I suggest that a gradual improvement in the economy will reduce the unemployment rate—over time—to the 'full employment' level. Included in the final number will be many permanently displaced from smokestack industries. Those with transferrable skills, or who are young enough to acquire a new skill, possibly in one of the service industries, will be reemployed, although probably at lesser pay levels than they previously enjoyed. Some will be employed only at the margin, the same thing that happened to those who lost employment when in-

> dustry left the Northeast. We are not, however, talking 11 million but—rather, small consolation—perhaps one- half million."

Yet Mr. Neylan was ready to suggest that "a highway program would contribute to our national well-being while remedying a serious national problem."

Both the Machinists and the Auto Workers unions have been advocating for several years an "active" government policy to promote employment. In previous years, panel members gave only brief attention to the matter. This meeting devoted a substantial part of its time to discussing what the government might do. Mr. Neylan's proposed restoration of highways and bridges, for example, was accepted by the group and a source of funds suggested: redirect defense expenditures. Commenting on this, one panel member said: "The unemployment situation is such a serious social threat to stability that we could appropriately call a highway program a genuine 'defense' expenditure." The group also generally agreed that "recovery will not come naturally without such a program to help reduce unemployment."

Another proposal, raised at the panel meeting, would have state governments issue industrial development bonds with the proceeds to be used by small private industry. A council of small industry at the local level would allocate, and help management of small businesses use, this capital.

The group saw three purposes in its various proposals:

- to lower unemployment
- to "pump money into the economy"
- to invest in basic facilities

The term "economic planning" came up and was not rejected out of hand. However, one member observed that with each recent recession, peak unemployment has been higher—yet there has been no massive turning out of politicians. There is no consensus "yet," he observed, for economic planning. The 1982 election did not focus on the issue.

The Election and Choices for the Future

A discussion of the effects of the 1982 election on Administration policy produced little agreement. One member suggested that defense spending will be redirected toward more labor-intensive activities in mid-1983, and the whole government will engage in "active, artificial" stimulation as the Presidential election year of 1984 begins. Another member pointed out that the Federal Reserve had "loosened up" on the money supply prior to the election. He predicted that the Federal Reserve would become even more liberal this winter and next spring.

Defense expenditures had been mentioned several times when one panel member met the subject head on. He observed that the electorate had "not seriously faced the main issue yet: how much defense do we want to buy—and what is the real price?" He thinks the answer might be "much less" because of the trade-off in reduced investment in our domestic "capital equipment" (roads, bridges, transportation systems, housing, education, etc.) and in social stability. Mr. Reagan, he said, has not clarified what his military goals are, yet "we are accelerating weapons hardware to the point where we are tempted to use it." He also noted: "We are buying sophisticated and fragile weapons that we are not even able to maintain in usable condition."

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Mr. Winpisinger advocated a comprehensive national recovery program that would include Mr. Neylan's highway restoration as an element:

> "We have advanced a number of proposals designed to meet critical unmet needs that have been neglected too long. This includes the badly deteriorating national infrastructure.
>
> "The IAM has designed and is advocating a program for rebuilding America. Rather than rely on the private investment decisions of a few giant multinational corporations, which represent a new sovereignty in the world, the IAM approach calls for national economic investment and production coordination, much as was used during World War II, with special targeted assistance to small-and medium-sized businesses that are now pretty well shut out of international trade. This is an adaptation of the kind of national economic planning long practiced by the United States' major trading partners in the NATO countries as well as Japan and Sweden. Most of these countries have stronger trade unions, higher wage levels, better access to health services, less unemployment, and lower inflation than the United States.
>
> "Other parts of the IAM package call for restructuring the energy industry and establishing a national health service. All parts of the program would require considerable trade-union and local-community involvement in planning and decision-making processes, particularly with respect to industrial plant shutdowns and plant relocations."

Some proposals were in favor of reinstitution of the human-resource investment programs of the early 1960's. Mr. Neylan said:

> "The Manpower Development and Training Act of 1963 was directed at upgrading skills in depressed areas and may have played a part in the development of the Sun Belt. Southern states, like North Carolina, have carried on similar programs, integrating industry into the process with considerable success."

Professor Lewin suggested another direct investment in reducing structural unemployment—a labor mobility program:

> "I would like to see a program of relocation allowances to encourage the movement of excess labor supplies to areas of excess demand. Even now, unemployment is not evenly distributed among economic sectors or occupations, structural unemployment apparently is on the rise, and unemployment responds more slowly than prices or wages to economic expansion. Encouraging labor mobility can, therefore, produce some reduction in unemployment.
>
> "Such relocations often involve the upheaval of personal, social, family, religious and other relationships. A program of support to ease these burdens seems to me to be both prudent and efficient. I also believe that selected extensions of unemployment insurance could and should be undertaken, for example, in specific geographical areas or occupational groups that have experienced particularly severe unemployment."

Donald Clem described an experience that suggests immobility among the unemployed—and that unemployment insurance is not arranged to create incentive for change:

> "What will happen to the 11 million currently unemployed? They will ultimately be absorbed by the balance of the economy but with some major problems. Union workers, unfortunately, are not very mobile. There will be little or no attempt on their part—based on past experience—to seek jobs (especially lower paying ones) until their current unemployment benefits expire. In recent years, when we were expanding in Pittsburgh and a neighboring forging plant, which at one time had employed over 1,000 people, was closing its doors, we were unable to attract even a single person, particularly in the skilled areas of maintenance, machining, crane operation, and so on. Why? Because they not only received Unemployment Compensation, but additional moneys, since they were supposedly put out of business by foreign competition. Unfortunately, when their benefits ran out, we were not hiring."

Linking payments to willingness to relocate, and to performance in a training program (as has been proposed by the Administration) might be one way to overcome the conservatism noted by Mr. Clem.

Don Ephlin reminded the group that:

> "Both the United Auto Workers and the AFL-CIO have proposed public works, public-service employment programs, and extended UC benefits. To avoid increasing an already hefty deficit, funds for those programs could come from cuts in defense spending and from closing tax loopholes.
>
> "The continuation of the current laissez-faire policies virtually guarantees chronically high unemployment levels. That is why I believe that the laissez-faire ideologues will be dethroned, and that our society will turn toward activist government policies to maximize the number of jobs and assure a fairer distribution of income.
>
> "Although the current recession qualifies as the worst since the Great Depression, the proportion of the unemployed collecting unemployment benefits is under 41 percent—compared to 64 percent at the trough of the 1974-1975 slump. There is a need to extend unemployment insurance to protect the long-term jobless. It is disgraceful that in the state of Michigan, which has been saddled with the highest unemployment rate in the nation for over 34 months, the 13-week unemployment insurance extension is expected to trigger "off" in a few weeks.[1] At that point, only the 10 additional weeks recently enacted will be available to those who have exhausted their 26 weeks of benefits.
>
> "Training programs, and especially the new program for dislocated workers, are a step in the right direction—but they are not enough. Public-employment opportunities must be provided for the long-term unemployed who cannot find jobs. Public works are necessary if the recession is to be followed by a sustained expansion and healthy productivity growth. As has been widely acknowledged, the crumbling infrastructure is one of the reasons productivity is lagging badly. The unconscionably high number of unemployed and discouraged workers implies that public-employment programs will be necessary as well. This is an opportunity to initiate an antirecessionary public- investment program that would put many of the unemployed to work rebuilding bridges, sewer systems, railroad beds, highways and so forth."

Capital Spending in 1983

At least until late 1983, the group sees no capital spending growth. Capital budgets are still being cut, and consumer confidence is so low that there is no gleam in the eye of producers. By late in the year, Professor Lewin suggested, Federal Reserve stimulation—added to fiscal stimulation—may foster some growth:

> "I expect to see greater investment in new plant and equipment in late 1983. The reasons include (1) the economic recovery that will take place by then; (2) con-

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[1] This process stops the 13-week extension of unemployment benefits. For details, see A. Freedman, *Security Bargains Reconsidered*. Conference Board Report No. 736. 1978, pp. 10-11.

tinued decline in interest rates in 1982 and stabilization, or only modest increases, in 1983; (3) growing recognition of the inferior position of U.S. industries in terms of ability to compete with foreign producers; (4) infusion of funds to certain firms and industries because of major increases in defense spending; and (5) a slight shift in emphasis from short-term to longer term investment strategies on the part of investors and, especially, managers and officials of private companies.

"The conventional wisdom about the savings- investment relationship for the economy as a whole has not proved out in recent years and new thinking is badly needed in this area. Ironically, one might have expected to see an upsurge in capital investment in 1982 when a Republican Administration, supposedly committed to supply-side economics, held sway. Since this did not occur, one should be wary about prognosticating future capital investment trends. Still, I expect to see a modesr growth of such investments in the coming year."

Robert Neylan is pessimistic:

> "It does not appear that capital spending will increase any time soon, not until late 1983 at the earliest. Reduced profits, high interest rates, and underutilized capacity are the reasons. The basic outlook is for a weak recovery, unlike the 'normal' recoveries of the past. We are accustomed to inventory rebuilding, growth in housing and durable goods, and recovery is off and running. This time we are burdened with high unemployment, gross lack of liquidity in business, low utilization of capacity, high (though declining) interest rates, and worldwide recession, with an overvalued dollar having an impact on exports.
>
> "Defense has constantly been expanding even during the recession, with order rates increasing by 50 percent more than in 1981. But defense does not have the ripple effect that autos or construction have demonstrated in the past. I do not expect defense to lead a recovery because the reach of defense expenditures is so narrow. The rich get richer but the poor get nothing. For example, the Navy will spend 96 billion dollars over the next five years on new ships and refurbishing ships now in service. This work will be done in the Navy's own shipyards and in a relatively few commercial shipyards. Many yards, like Bethlehem Steel's Sparrow's Point (Maryland) and M-K's National Shipbuilding (San Diego) will run out of work in the absence of a commercial boom. Although defense provides work to prime contractors and a multitude of subcontractors, it is not sufficient to drive us out of a recession without the power of auto, highway construction, or home building.
>
> "Once consumers are convinced that inflation is contained, they may start spending, and autos are logical candidates. Pent-up demand for housing exists now. Both housing and autos will influence capital expansion as defense and high tech never could."

Construction and Recovery

If there is a strong recovery in the construction industry, the same forces that have moderated wage increases could turn around. This would be especially true if a public-works program came into full activity at about the same time as capital spending spurred private construction. Professor Lewin offered this description:

> "I expect to see a modest recovery in the construction industry in 1983. At the same time, and in part because of recovery, I also expect construction industry wages to rise more rapidly in 1983 than in 1982—say 8.0 to 8.5 percent compared to less than 7.0 percent. An increase in the demand for labor that is associated with 'producing' that good or service—and this is the scenario I envision for construction industry wages—will be tempered by (1) rising interest rates in the latter half of 1983, which will reduce the rate of growth in housing and commercial construction; (2) continued growth of the nonunion share of the construction industry, which now accounts for a majority of economic activity in this sector; (3) lags in the adjustment of collective bargaining and labor-market conditions to overall industry conditions and product demands; and (4) continued high unemployment for skilled workers in a variety of construction trades.
>
> "All of this suggests a modest recovery in construction in 1983 *and* moderate increases in the rates of wage and labor costs, with the continued growth of the nonunion sector exercising a restraining influence on the unionized sector (and a continued narrowing of the gap between union and nonunion pay and benefits)."

Protection from Competition

As unemployment rose through 1982, there have been more special appeals for protection from imported manufactured goods "in order to save jobs." (It would not be effective to appeal for protection "in order to save higher prices.") Success at restricting imports has been achieved by the steel industry in 1982, and it plans further efforts in 1983. The auto union has proposed restricting the amount of imported components in cars sold in the United States. Mr. Neylan commented:

> "Some legislators, at the behest of the auto companies and unions, are pushing domestic content legislation. The UAW claims that the legislation would save 800,000 jobs. (The Congressional Research Service estimates the saving to be 275,000.) Little thought has been given to the fact that the legislation would violate the General Agreement on Tariffs and Trade (GATT), which specifically prohibits domestic-content requirements. Steel has achieved a victory of sorts in its anti-dumping suits but imports from countries not involved, like Brazil, continue to come into our markets.
>
> "The push for protection ignores the fact that our basic problem is that we have lost our monopoly position in many products. The push for domestic content in autos ignores the $65 billion that the auto industry has invested for the express purpose of recovering its competitive position in the domestic and international markets. I give auto-sponsored legislation little chance of passage.
>
> "We no longer have a significant railroad passenger-car

industry, and purchases of Japanese and Canadian subway cars no longer make headlines. The Airbus created a flurry of excitement because of the subsidy implicit in its financing, but our leadership in commercial aviation is significant enough to mute the cries for relief. Our aircraft industry grew as a result of intense competition, has developed a clear technological advantage, and markets its product aggressively (unlike the smokestack industries).

"We have a strong position in semi-conductors, although the Japanese have now increased their worldwide market to about 35 percent. Japanese market focus on Europe, particularly in commodity memory devices, is a response to the suggestion of import quotas. I do not see broad- based support for protection in electronics. We have conceded the market in television, but the rest of the industry is simply too young and vigorous.

"Steel will continue aggressively pursuing its antidumping activity in a vain attempt to secure its market position. Unfortunately, in commodity products most efficient foreign producers have no need to dump since they can probably compete directly in this market. Steel's future lies not in tariffs but rather in rationalizing its output by shelving inefficient capacity and concentrating on specialty products. In summary, I suggest that protectionist legislation will not pass but I would expect renewed activity for 'voluntary limitations' on specific products—auto and steel in particular."

Mr. Winpisinger comes down squarely in favor of protection in heavy industries:

> "Current legislative developments indicate the least we can expect in the way of protection of U.S. markets and workers is some degree of 'content' legislation for industries that have been hardest hit by foreign imports. And it is about time. The United States has been playing patsy to the rest of the world ever since the end of the Second World War. We have given other countries easy access to our markets while they have erected a wide range of direct and indirect barriers to stop our goods at their borders.
>
> "When Japan takes direct aim at our semi-conductor industry (as it has), or France decides to try to knock the U.S. aerospace industry out of the air (as it has), this is not free competition. This is a matter of governments subsidizing every aspect of planning, financing, production and sales. Even a company as well managed as Boeing does not have the resources to compete against a French aircraft industry subsidized and backed by the French government. At some point, our government is going to have to provide the same kind of support and protection to industries and workers that are being bankrupted by this kind of competition.
>
> "All of the industries mentioned—that is, autos, transportation, machinery, electronics and steel—are essential to the future of this nation. All are being systematically destroyed today. If we intend to have the capability to defend ourselves (and the rest of the so-called 'free world'), it is time to start thinking about where the next generation of skilled craft workers will come from, once these industries are allowed to go down the drain.
>
> "While it is incredible that our once great machinery and machine-tool capability is being destroyed by imports from Japan and Europe, it is even more incredible that our military is becoming increasingly dependent on sensitive military equipment produced in Korea and Japan.
>
> "Some of the jobs that will never be regained are in industries that are being wiped out by competition subsidized by foreign governments—autos, steel, shipbuilding, machine tools."

However, Mr. Winpisinger is not willing to place all the blame for steel's weakness on the subsidies accorded foreign producers:

> "The real issue here is whether the workers should have to pay for steel management's 20 years of failure to modernize. The steel industry's inability to compete with more modern, government-subsidized, foreign manufacturers is largely due to its own shortsightedness.
>
> "These companies now blame their plight on wages. But what do they want? Surely it is not realistic to believe wages in the United States can be reduced to the levels paid in Taiwan, Korea or Mexico. Such wage differentials have always been there. In the past they were a source of national pride because we had a technologically advanced industrial base. If that is no longer true, it is not labor's fault."

Daniel Mitchell expects a "pro-market" philosophy in the Administration to prevent a rise in legislated protections. But an Administration that listens carefully to the requests of individual business leaders may respond with informal help against import competition.

> "Pressures for import limitations have historically accompanied high unemployment. The Smoot-Hawley Tariff increases of the early 1930's are a prime example. However, the trend in the post-World War II period has been to put more and more authority over tariffs and other trade barriers in the hands of the President. Since the Reagan Administration opposes trade barriers, its opposition is a powerful force limiting the chances for such measures.
>
> "However, it is possible for pressures to develop at the margin for trade barriers through informal arrangements that avoid formal legislation and rule making. The limits on auto imports from Japan are an example. There may be more pressure for 'temporary' agreements to hold down imports. Steel has had some success along these lines in the past."

Mr. Clem, speaking of the steel industry, makes a distinction between legislated protection (tariffs and/or quotas) and "voluntary restriction" by exporting countries:

> "We hope that the government continues to oppose unfair trade practises, such as dumping. In our opinion, a forceful, unfair, protection effort will ultimately result in

> voluntary negotiated agreements. Conversely, legislation that restricts fair trade will ultimately cause the foreign countries to restrict importation of American goods."

The trade issue also comes up in over-the-border assembly or fabrication operations in Mexico and, perhaps, Canada. With particular reference to autos, Don Ephlin comments:

> "Over-the-border fabrication and assembly operations have in some cases contributed to job preservation this side of the border as they have allowed *part* of the manufacturing process to remain here rather than to be shipped abroad wholesale.
>
> "In other instances, positive employment effects of over-the-border fabrication among U.S. workers have derived from the need to import U.S.-made parts to supply assembly operations in Mexico or elsewhere. That type of positive effect is often transitory, however. As companies become more vertically integrated within those countries, the export of either finished products or parts to the United States becomes detrimental to U.S. employment.
>
> "The auto industry is a case in point. The U.S. auto companies have set up operations in Mexico with the intention of complying with the Mexico Auto Decree, which in the long run attempts to assure a trade surplus in its auto sector. Up until last year, the trade surplus had been extremely favorable to the United States; a booming economy had been fueling Mexican demand for cars, and Mexico plants set up for exports had not yet come on stream. In 1982, the situation has changed drastically. The Mexican economy has collapsed and exports to the United States, mainly engines, are increasing. Our trade surplus will shrink at best—and may turn into a deficit, with more to come in the future. Clearly this matter needs our government's attention, to dissuade the Mexican government from attempting to develop that country's auto industry at the expense of U.S. workers' jobs.
>
> "This example also underscores that nothing better serves the purpose of employment gains or stability in the United States than a prosperous Mexican economy—a concept that can be extended to all of Latin America. More prosperity across the border would not only imply higher U.S. exports there, but also fewer incentives for illegal immigration, in both cases bolstering employment of American workers."

Immigration Policy

Just as protectionism rises during recession, there is increasing interest in containing the labor-market entry of immigrants. Legislation is now being considered that would require employers to verify that a prospective employee is a citizen or a documented immigrant; it contains sanctions to prevent the employment of undocumented aliens. Some employer groups oppose the legislation, and its passage at this time is in doubt. Mr. Winpisinger and Mr. Ephlin are in favor of such restrictions. In the former's view:

> "Since a bill to penalize employers of illegal aliens has passed the Senate and is moving through committee in the House, it would seem the prospects for such legislation this year are excellent. And, in my opinion, it is long overdue. No other country makes it so easy for illegal aliens to crowd into its labor force. If this means worker identification papers, so be it. In other democracies, including the EEC and Scandinavian countries, requiring working papers has not reduced the freedom of the native work force in any meaningful way.
>
> "The effect of illegal immigrants on U.S. labor markets is to depress wages, take jobs that could be filled by unemployed citizens, and subvert standards of health and safety on the job. Since illegal aliens are afraid to complain, they are more easily exploited by unscrupulous employers who profit by perpetuating sweatshop wages and working conditions.

And from Mr. Ephlin:

> "Much of the current population of undocumented aliens is working at jobs that are shunned by the U.S. work force, because of the nature of those jobs, the rate of pay, and the lack of benefits. However, as American citizens or legal immigrants increasingly fall prey to unemployment and the lack of government assistance, they are in all likelihood becoming more willing to bid for jobs that were unattractive some time back. The resulting competition can only be detrimental to already substandard wage rates and working conditions.
>
> "In addition, the dismal state of affairs in many Latin American countries has stimulated illegal emigration to the United States of people with more skills than the traditional emigrant. These undocumented aliens are competing with fully documented workers in 'primary' labor markets, again with depressing effects on wage rates and working conditions. Current conditions in Mexico are a case in point. Not only is that country's severe recession an incentive to cross over to the United States in search of work, but the devaluation of the Mexican peso makes any dollar earned here much more valuable back home than it was just a few months ago. This development is bound to aggravate already dire U.S. labor-market conditions, particularly in the Southwest."

Daniel Mitchell offered some reasoning that explains why those who favor import restriction might also favor immigration restriction:

> "In international trade theory, there is symmetry between goods movements and factor movements. Simply put, import and export goods implicitly contain the labor it took to produce them. When we import products, we import the labor it took to produce those products. When we export products, we export the labor contained in them. Thus, trade in goods is more or less interchangeable with movement of labor across international borders. You can import people or you can import the goods they make."

He calculated the cost of an identification system for "legal" immigrants:

> "About 120 million people were in the labor force at some point during 1981. If all of these people were issued counterfeit-proof ID cards, and if each card cost $1 to produce, the production costs alone would be $120 million. To this would have to be added distribution costs and systems to verify the identity and status of individuals applying for cards. Use of identification other than specially produced ID cards would be of limited effectiveness because of the possibility of false papers and improperly obtained identification.

Mr. Neylan strongly opposes immigration restrictions—which fits in with his overall free-trade philosophy:

> "The depth of our present economic slump has unquestionably revived the movement to readdress immigration policy, but I think that the Congress will not support it. The notion of employee identification is repugnant to our society and I assume that President Reagan (who came to office on a wave of free-market rhetoric) would use his office to stop the legislation, by veto if necessary. The years spent in legislating discrimination out of existence would, in the main, be wasted, to say nothing of the bureaucratic structure needed to support the program. To burden the legitimate employer with the prospect of fines or other sanctions if his employee proves to be an illegal is more than he should bear. I am not aware of any foolproof identification system, even if I can get myself past the revulsion the notion induces. If I were a first-generation citizen of southern European, Slavic or Hispanic origin, I would be genuinely and legitimately concerned.
>
> "I don't question that the existence of illegal aliens in U.S. labor markets acts to depress wages in the segments of the market where illegals are employed. It is simply a question of supply and demand. At the same time, I reject the notion that they occupy, in any meaningful way, jobs that would otherwise be taken by unemployed Americans. As illegals enter the mainstream after a period of residence, they become upwardly mobile. They have aspirations just like everyone else, and may even be more intent on performance than the native born. In this context those with skills, or those who have developed skills here make a positive contribution to our society. Those who come have the same drives that the Pilgrims had: They are looking for opportunity in the last free society in the world. The downside of restrictive legislation is a net loss of our personal freedom and the unfavorable reaction to be anticipated from our neighboring republics."

And Again, Unemployment Is Now The Greatest Concern

The Conference Board's Labor Outlook panel kept returning to the volume of unemployment as the issue of greatest importance in 1983. Even the most optimistic member, David Lewin, considered the unemployment level critical:

> "Some of the jobs lost in manufacturing, construction and mining will be regained in a recovery from the recession—as is typical in all economic recoveries. However, the situation in manufacturing is not one of decline due solely to recession, but is also the result of increased competition, especially from abroad. Foreign producers of autos, steel and rubber products are more efficient than U.S. producers and have gained market footholds that will not be easily—if at all—dislodged. This fact, together with the increased substitution of capital (e.g., electronic assemblers and industrial robots) for labor in many manufacturing industries, means that some—and perhaps a large part—of the recent job losses will not be recovered.
>
> "What will happen, then, to the 11 million unemployed? How readily will those among the unemployed whose skills are obsolete acquire the skills and training to fill jobs in growth sectors such as trade, finance, insurance and real estate, services and communications? In the longer term, such skill acquisition is likely to take place, especially if product demands are strong. However, the unemployed will bear a heavy burden in the interim. It is probably also true that the levels of frictional and structural unemployment have increased over time—types of unemployment that are not amenable to solution via economic expansion alone."

The Conference Board's Labor Outlook panel has been an accurate predictor of change, and so its sharp concern about unemployment levels indicates another possible shift. The group appears to feel that this is not a "normal" cyclical phenomenon that will evaporate in a year. For this reason, government interventions were favorably discussed. Thus it seems that a deep recession that cuts down price and wage inflation may bring in its wake widespread demand for "active" government intervention in the labor market.

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Research Bulletin

U.S. Regional Economies

An Updated View of 1982-1983

The Conference Board

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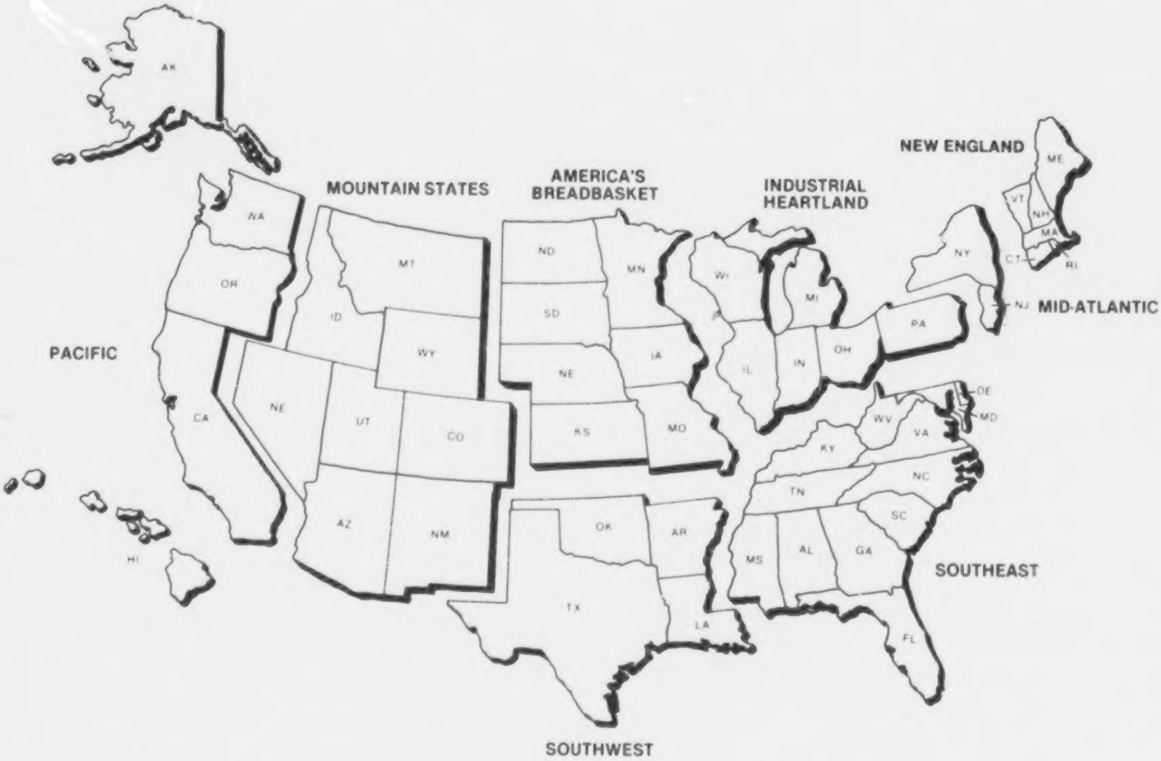
NEW ENGLAND
MOUNTAIN STATES
AMERICA'S BREADBASKET
INDUSTRIAL HEARTLAND
MID-ATLANTIC
PACIFIC
SOUTHEAST
SOUTHWEST
AK
HI
WA
OR
CA
ID
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The U.S. economy has basically been in a slump for three years. There was a recovery from mid-1980 to mid-1981, but it was short and weak; many economic indicators failed to regain their previous highs before starting down again. There has been some slight upturn but, as 1982 ends, the rate of economic activity in real terms—that is, omitting inflation—is just about where it was three years ago.

The Spring, 1982, meeting of The Conference Board's Regional Economic Forum was, as noted at the time, "not cheerful." The forum looked for only a modest rise in activity in the second half of 1982 and, at best, subdued growth in 1983 and perhaps beyond. The group's expectations were not spelled out in detail, but it is very probable that the actual course of events in 1982 has run weaker than those expectations.

In the Spring, the forum noted that no region is recession-proof. In a fast-growth region, a national recession manifests itself as a slowdown of growth, not an outright drop in activity, but that slowdown is a major deviation from "normal." The current recession has lasted so long that it has had time to become unusually pervasive, and this is reflected in the updated regional assessments. All regions are feeling it.

The Spring meeting of the forum took particular note of two industries—agriculture and oil—whose weakness was exacerbating the effects of the general slump. The updated reports reiterate this view, noting serious impacts in the Breadbasket, Southeast, Mountains and Southwest. The only industry generally mentioned as showing real signs of recovery in 1982 is residential construction, whose rebound was set off by the decline in interest rates. The forum participants consider the decline in rates to be the key to a broader economic recovery in 1983, and it seems to be implicit in most of the reports that further rate declines are expected. In general, the reports are very cautious about the growth outlook for 1983; the tone seems to be one of hope that the consensus expectation of some growth proves correct, but there is no firm conviction that it will.

Lora S. Collins
Director-Business Conditions Analysis

New England

Frederick Breimyer

First National Bank of Boston

Prospects for the New England economy have worsened in recent months in keeping with the deterioration of the national outlook. The 1981-1982 recession is now likely to spill over into, and perhaps well into, 1983. The unusual character of this recession has made recovery elusive. The recession was not brought on by the typical dynamics of the business cycle, but by exceptional national economic policies and structural adjustments. Put differently, this recession has been not so much a cycle as a siege, and consumers and businesses have responded by developing a siege mentality.

The economic indicators show that New England has been less adversely affected than the nation as a whole. Employment has slipped in each of the six New England states over the past year, bringing employment levels as of the third quarter to 1.7 percent below those of a year earlier. For the United States as a whole, the decline was 2.2 percent. Moreover, New England was substantially better off going into the 1981-1982 recession than other regions and retains that earlier advantage. As measured by recent statistics, the unemployment rate in New England averages more than 2 percentage points below the national rate. Manufacturing jobs have been the most deeply affected by the recession, dropping about 7 percent in the region. The employment decline in high-technology manufacturing has been at least as severe as that in nondurable goods, because of the large and continuing cutbacks in capital spending. Service employment continues to expand, but at a much reduced pace.

Even as the recession bites more deeply, many New Englanders are attempting to hold on to earlier optimism. That optimism has been warranted in many ways. New England has experienced a transformation in its manufacturing base, replacing jobs in economically mature industries that were low paying and increasingly uncompetitive with better jobs in high-technology manufacturing and in service industries. The challenge of revitalization now faces other regions in the United States, which earlier had regarded such structural transformations as peculiar to New England. Also, New England is now less disadvantaged by its heavy dependence upon foreign oil: Petroleum prices worldwide are stable, or falling, but natural gas users are experiencing rapidly rising prices as the result of deregulation. Indeed, "energy dependence" has taken on a new meaning as petroleum-producing states find their economies vulnerable to the oil glut. More generally, the extractive and agricultural industries of the nation are suffering more than at any time during the past 50 years. By comparison, New England is relatively well off, well diversified, and capable of growth in anything approaching a benign national economic environment.

NEW ENGLAND

ME
VT
NH
MA
CT
RI

Even if the United States were to experience little significant economic growth during the 1980's, the impact on New England would likely be less adverse than elsewhere. New Englanders are accustomed to slow growth, and the region has not leveraged itself for future growth, although the boom in office construction may be an exception. Indigenous population growth is small, helping to keep unemployment down. Moreover, the high-tech industries are inherently entrepreneurial, directed toward developing new products with enhanced efficiencies rather than toward large-scale production. No region can be invulnerable if the national economy falls into a persistent slump, but New Englanders, to a large degree, have covered their economic bets.

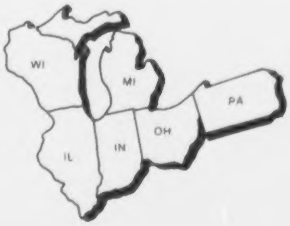
"The Industrial Heartland"

Elizabeth A. Bossong

United States Steel Corporation

The continuation of overly restrictive monetary policy into the second half of 1982 has foreclosed any hope of national recovery during 1982, and has plunged the Industrial Heartland deeper into the lowest operating levels and highest jobless rates since the 1930's. Yet, while seemingly terminally ill, the heart is still beating and some of the wakes being held for smokestack America may be premature. However, recovery is dependent on *sustained* relaxation of monetary policy and an adequate supply of credit.

INDUSTRIAL
HEARTLAND



It would be difficult to overstate the damage done to basic U.S. industries and workers by the volatile and unprecedentedly high interest rates that have characterized the years since October, 1979, when the Federal Reserve changed its operating procedures to emphasize targeting of the aggregates. This drove up the price of money as money supply was constricted. In addition to the direct effect on interest-rate-sensitive sectors of the economy, high interest rates triggered an upward explosion in the international value of the dollar. The resulting overvaluation of the dollar, coupled with the weakness of some other currencies, especially the yen, has drastically but artificially reduced the competitiveness of U.S. products. Worldwide recession, subsidized industries abroad, and predatory penetration of the large and relatively open U.S. market, combined with the substantially overvalued dollar, have resulted in a sharp slide in our balance of trade. This accounted for more than 40 percent of the decline in GNP between the third quarters of 1981 and 1982.

During 1982, industry operating rates have fallen to lows not experienced since the 1930's. The jobless rate in centers of manufacturing dwarfs the national average (although the latter is climbing as the depression in the Industrial Heartland has spread outward to sectors previously relatively unscathed.) The Heartland, with its high proportion of cyclically vulnerable industries, has been savaged.

The steel industry's operating rate will average only about 40 percent of capacity in the second half of 1982, and output for the year will be off one-third from an already sluggish 1981 total. Meanwhile, import penetration is hitting a record 22 percent of the domestic market. Auto production, contrary to all expectations, will not only fail to surpass the depressed 1980-1981 levels but will sink to about 5.1 million units. Freight-car deliveries in 1982 will be 60 percent below 1981, and barge building will be off 75 percent. The output of construction, industrial and electrical machinery, reflecting the impact of falling investment spending and a collapsing trade balance, will be off about 20 percent in 1982, and only a strong economic revival can prevent a further decline in 1983. The continuing weakness in contract awards nationally and in the Heartland indicates that heavy construction activity will decline.

Construction Contracts[1]—Industrial Heartland and United States

				Percent change 1979 to 1981	Nine months		Percent change 1981 to 1982
	1979	1980	1981		1981	1982	
	Nonresidential Buildings—Millions of square feet						
US..........	1,377	1,200	1,166	—15	903	722	—20
IH..........	320	257	206	—36	165	116	—30
IH as % of US	23	21	18		18	16	
	Residential Buildings—Billions of Dollars						
US..........	71.8	60.3	56.2	—22	45.1	38.6	—14
IH..........	14.5	9.9	8.7	—40	6.9	5.6	— 9
IH as % of US	20	16	16		15	15	

[1] F.W. Dodge data. Industrial Heartland represented by F.W. Dodge Regions 4 and 5.

On the assumption that Federal Reserve monetary policy will *not* accommodate all of the credit demands of the private sector as well as the Treasury, and that the Fed will continue its effort to curb inflation through restrained monetary growth, real interest rates will remain relatively high in 1983. The economy will grow by only about 2 percent. In such a slow-growth economy there is no room for growth in consumer durables; there is no incentive (or cash) for increased investment in plant and equipment; there is no demand for transportation equipment; and there is no growth in steel consumption.

To state the obvious, basic industry and the Industrial Heartland need strong cyclical recovery, not the 2, 3 or even 4 percent real growth now widely assumed, and in some circles favored, for next year. The stagnation in much of smokestack America since the early 1970's and during the present industrial depression is far more the consequence of suppressed economic activity than of basic structural change in supply and demand forces. If the economy comes back strongly, at a growth rate of 6 percent or so for two or three years, the recovery in industrial activity and in the Heartland will be dramatic. Anything much less will weaken us economically, politically, socially and militarily.

The Mid-Atlantic

Thomas J. Spitznas

Chemical Bank

MID-ATLANTIC
NY
NJ

Lasting much longer than expected, the nationwide 1981-1982 recession finally arrived in the Mid-Atlantic region. Through the first six months of the national downturn, Mid-Atlantic region's industry mix—heavy in the less cyclical service and finance industries—helped, at least partially, to immunize the region from the nation's ills. However, with the recession prolonged well beyond one year, there was greater opportunity for weaknesses in the cyclical industries to spread to services and finance and thus have a growing impact on New York and New Jersey. Even so, during the current period of economic malaise—measured either from July, 1981, or from January, 1980—the Mid-Atlantic region still continues to outperform the country as a whole by a wide margin.

Within the region, New York State appears to be doing slightly better than New Jersey. Private employment is holding up somewhat better in New York (see table); however, the November unemployment rate was 9.9 percent for both states (compared with 10.8 percent nationally). The unemployment rate in the Mid-Atlantic region has remained around one percentage point below the national rate for most of the current recession.

Within New York State, the New York City region is clearly outperforming the rest of the state—just the opposite of the situation during recessions in the 1970's.[1] Private payroll employment in the New York City region still has not fallen below the level at the most recent national business-cycle peak (July, 1981). Nevertheless, the office construction boom in New York City is over and activity in the City's mainstay service sector is now sluggish at best.

Throughout the Mid-Atlantic region, the recession's impact on the manufacturing sector does not appear to be as severe as at the national level. This is true despite the fact that much of the region's manufacturing industry is antiquated. One likely explanation is that the region's manufacturing industry mix is tilted away from the heavy, basic industries that are catching the brunt of the recession. Another possible reason is that a considerable share of manufacturing employment in the New York City area is in company headquarters.

Percent Change in Private Payroll Employment (seasonally adjusted)

	July 1981 to September 1982	January 1980 to September 1982
United States.......	—2.6%	—1.6%
Mid-Atlantic........	—1.0	0.4
New York	—0.9	0.6
New Jersey	—1.5	—0.2

The outlook for the Mid-Atlantic economy in 1983 is certainly less optimistic now than was perceived last Spring. However, this is mostly due to the prolonged national recession and not to any new structural problems in the regional economy. Therefore, the anticipated recovery in the national economy, which should begin in a meaningful way in 1983, will lead to an economic revival in the region. Because the national recovery will be slow, economic activity in the Mid-Atlantic region will rebound more slowly than during the brief recovery period following the 1980 recession. Beyond 1983, the outlook is more promising all around.

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[1] New York City and Nassau, Suffolk, Westchester and Rockland counties.

The Southeast

Gene D. Sullivan

Federal Reserve Bank of Atlanta

The southeastern economy was expected to be showing definite signs of recovery by the second half of 1982. Tax cuts and increased social security payments were projected to combine with lower interest rates to produce a bulge in consumer expenditures that would spark the region's weakest sectors—housing and manufacturing—to new growth.

As the fourth quarter unfolds, the spending bulge has not yet appeared. Interest rates have come down, but the drop came much later in the year than was originally anticipated. Instead of rushing out to spend their increased income, consumers have behaved cautiously by saving their extra dollars. They have apparently been waiting for signs that the recession will grow no worse—and perhaps looking for evidence that the economy is improving—before they begin to increase their purchases. Consumers have been unwilling to obligate themselves for postponable purchases as long as there is the risk that they might yet lose their jobs.

SOUTHEAST
DE
MD
WV
VA
KY
NC
TN
SC
MS
AL
GA
FL

The Southeast region's unemployment rate reached 9.9 pecent in the Fall, matching the peak of the 1973-1975 recession. The major weaknesses are found in states with relatively large manufacturing, mining and construction sectors. Alabama, the state most adversely affected, had a jobless rate of 14.7 percent. Thanks to heavy concentration in service industries, Georgia and Florida are faring unusually well by comparison, with jobless rates averaging 7.7 and 7.5 percent, respectively. But even in these states, important industries have experienced severe recession. West Virginia, Mississippi, South Carolina, and Tennessee have been particularly hard hit; and the petroleum slowdown has pulled down Louisiana's economy, in contrast to the last recession when brisk activity in oil helped that area to escape the slump. The glut in petroleum supplies, accompanied by the global recession, is likely to keep the oil business in the doldrums for an extended period. The coal industry, riding on the crest of the earlier oil boom and national emphasis on energy independence, now also finds less eagerness among customers who had been scrambling to switch from oil to coal as an energy source. However coal exports seem to be maintaining a growth momentum.

On the whole, employment was still declining in Southeast during the Fall. Service employment has continued to grow throughout the recession and public-sector employment, although still declining, has been falling less rapidly. However, employment in trade, finance and transportation, as well as in manufacturing and construction, was either still trending down in the Fall or showing little evidence of an upturn.

The agricultural sector is experiencing depressed incomes and large net losses primarily attributable to bumper crops nationwide, low prices, and high costs. The major exceptions in the Southeast are producers of tobacco, sugarcane and milk—who have fared relatively well in 1982 because of rigid price-support programs—and hog farmers, who have reaped the benefit of high prices from a large cutback in production. But the majority of other farmers have marketed 1982 output at prices well below year-earlier levels. As a consequence, the Southeast is plagued with loan delinquencies and increased failures of highly leveraged operations; and manufacturers and merchants of farm equipment and supplies have also suffered

The tourist industry, too, has suffered from reduced travel, and especially from a slowdown in foreign visitors. Conventions have attracted fewer delegates, and hotel-motel occupancy rates have been depressed. The Knoxville World's Fair provided a pickup for the east Tennessee area, but few benefits from that event accrued to other areas of the Southeast.

International trade through customs districts of the region is off substantially. Losses from a year ago in export values typically ranged from 5 to 7.5 percent although the Tampa port sustained a 19 percent drop, reflecting the severe downturn in the phosphate industry. Import volume typically declined even more, with the Mobile port's reduction pegged at 38 percent. Special products being developed for export markets, along with increased diversification of port facilities, should contribute to improvement in the region's trade volume in 1983.

Construction was the lone sector to exhibit signs of improvement as the southeastern economy entered the fourth quarter of 1982. Residential building permits began to increase with the decline in mortgage interest rates at midyear. Although the upturn occurred at an unusually low level and activity thus far remains far below normal, the momentum of recovery appeared finally to be gathering strength during the last quarter of 1982. With further declines in interest rates, the construction industry should provide additional strength by the Spring. Consumers are also likely to have begun spending more freely by then. In response to this growing demand, manufacturers should begin recalling workers. That will be particularly good news for the region's concentrations of building materials and automotive-related manufacturing industries. These improvements, combined with the anticipated growth in tourism related to Walt Disney world's new EPCOT attraction, should move the southeastern economy to recovery in earnest by the second quarter of 1983.

"America's Breadbasket"

Marvin Duncan[2]

Federal Reserve Bank of Kansas City

Agriculture in the breadbasket continues to be burdened by large supplies of major crops and by crop prices at or below break-even levels, although easing of inflationary pressures is slowing the rise in production costs. Net farm income for 1982 is significantly higher than had been forecast earlier in the year, but still well below the levels of recent years. Low farm income and reduced cash flow have adversely affected the debt repayment capacity of many farmers. Nonetheless, with recovery in prospect for 1983—in the general economy and for farmers, as well—some modest improvement in farm prices and income is expected next year.

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AMERICA'S BREADBASKET

For the second year in a row, U.S. farmers harvested bumper crops. Wheat production in 1982 was a record

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[2] The views expressed are solely those of the author and do not necessarily represent the views of the Federal Reserve Bank of Kansas City or of the Federal Reserve System.

2.8 billion bushels. Corn production of 8.3 billion bushels topped the 1981 record output. Soybean production reached 2.3 billion bushels, a new record and 15 percent above 1981 output. Cotton production, however, totaled 11.4 million bales, off nearly 27 percent from 1981.

Efforts to reduce food and feed grain output in the United States in 1982 were generally unsuccessful. While about 48 percent of the wheat acreage and 29 percent of the corn acreage were in compliance with the Agriculture Department's acreage set-aside program, excellent growing weather offset the effect of fewer acres. Cotton producers, with a larger proportion of compliance in the acreage set-aside program (estimated at about 75 percent) and serious weather problems, did reduce output significantly. Only those farmers in compliance with the 1982 farm program for the crops they grow will receive target price protection and be eligible for Commodity Credit Corporation loans on those crops.

Carry-over stocks at the end of the 1982-1983 marketing year will be at very burdensome levels for most major crops and for cotton. These carry-over supplies are currently expected to equal 55 percent of total annual utilization for wheat, 45 percent for corn, 20 percent for soybeans, and 57 percent for cotton.

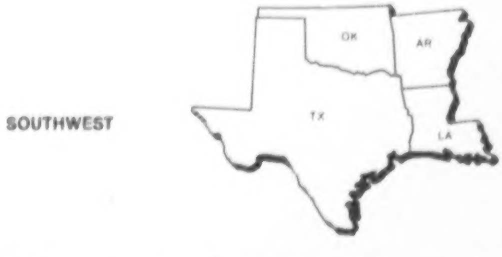
Total red meat and poultry production continues to be significantly below year-ago levels. Hog production in the fourth quarter of 1982 may be off as much as 18 percent from a year earlier, while beef production may about equal the year-ago output. Hog production has been very profitable for farmers during 1982. Reduced beef production has resulted in relatively profitable prices for cattle feeders for much of 1982. Ranchers have also enjoyed some price improvement for feeder cattle, although prices still appear to be below the full cost of production.

Net farm income for 1982 is expected to reach $19 billion, significantly above forecasts earlier in the year but 24 percent below the 1981 figure. The pressures of low farm income and the high cost of carrying debt have resulted in declining farm real-estate values across the nation. In the Tenth Federal Reserve District, cropland values are off 15 to 17 percent from the market high of about 18 months ago. Thus, farmers are experiencing the third year in a row of depressed farm income and declining real farm-sector equity. As financial pressures have intensified for farmers, exits from farming and partial liquidations of farm businesses have apparently increased substantially during 1982. Such situations still represent a small proportion of U.S. farmers, however.

Farm income prospects for 1983 are buoyed somewhat by expectations of improved overall economic performance in the United States and in a number of our industrial-country trading partners. As a result, some price improvement appears likely for cattle and hogs and, perhaps, for major grain crops as well. With easing in the rise of production costs also likely, farm income should post a modest improvement in 1983. That, in turn, will begin to ease the financial pressures that are currently burdening the farm sector.

The Southwest

James A. Byrd
InterFirst Corporation



The Southwest regional economy, in addition to feeling some negative effects from the national recession, has in recent months been affected by the bursting of an oil-drilling "bubble" this year. As a result, unemployment rates in Texas and Oklahoma have been increasing further.

The "downers" in the region throughout 1982 have continued to be the sectors most affected by the national recession—residential construction, domestic-model auto sales, and sales of other big-ticket consumer appliances. However, the downturns in these measures in the region have been only about half as sharp as those in the comparable national magnitudes. New housing activity began to show significant improvement in Texas in the Fall, especially apartment-building activity.

Oil and gas drilling activity in Texas and Oklahoma have been hit hard by severe cutbacks in the number of drilling rigs in operation and in the related drilling service and supply sectors. About 40 percent of the drilling rigs that were active last year have been stacked this year. Hundreds of drilling crews have been terminated. It is interesting to note, however, that footage drilled this year has been about the same as last year, which suggests that major drillers are drilling deeper wells.

Unemployment rates in all four states of the Southwest region increased this year (see table). Oklahoma's rate moved upward from a "full employment" level. Louisiana's rate about matched the national average, while Texas, Oklahoma and Arkansas remained below it.

Unemployment Rates
(not seasonally adjusted)

	September 1981	September 1982
Texas	5.4%	8.0%
Oklahoma	3.4	5.9
Arkansas	7.9	9.1
Louisiana	7.9	10.6

Agriculture and related agribusiness activities have continued to post the weakest performances in the region this year. Oil- and gas-drilling activity joined the "weak" list during the year. Currently, there is increasing concern that office-building construction in major metropolitan areas of the region may have gotten ahead of itself in its own private cycle.

The consensus outlook for the nation's economy next year now calls for a slow-paced recovery at about half the speed of the average recovery since World War II. The Southwest region's outlook is a bit better than that, with the price-increase outlook about the same as for the nation.

The Mountains

Tucker Hart Adams

United Banks of Colorado

The impact of falling oil prices, which was just beginning to be felt when the Forum met in April, 1982, has had an even more dramatic impact on the Mountain region's economy than we anticipated. It was almost as though it had not occurred to the energy-producing states that oil prices could go down as well as up. By late 1982, 40 percent of the region's oil rigs were stacked; oil shale had boarded up its windows and gone home (with the exception of the Union Oil project in Colorado); expansion plans had been put on hold; and a massive shake-out of highly leveraged, poorly managed firms was under way.

The region's overreaction to declining oil prices showed up in a higher then expected unemployment rate in 1982, and less growth than we had anticipated in retail sales. The 92 percent of the region's labor force which still has jobs continues to be in a good position to lead the spending spree that will trigger economic recovery. Nevertheless, fear of job loss as the region's unemployment rate moved above 8 percent held retail sales expansion to 7 percent in 1982, below the local inflation rate. Personal income growth for the year has been in line with our earlier forecast of a roughly 9½ percent rise.

Inflation has improved more dramatically than seemed possible six months ago and seems likely to remain subdued in 1983. As a result, we have lowered our projection of nominal income growth in 1983 by two percentage points, although our estimate of real growth remains unchanged. The same holds true for the retail trade forecast. The consumer spending which did not materialize in 1982 is expected to occur in 1983.

National attention has focused on the overbuilt office market in metropolitan Denver, and nonresidential construction has indeed slowed sharply. The drop could have been even more substantial if expansion of industrial space had not absorbed some of the slack. Nonresidential construction will continue to be depressed in 1983 as Denver begins the three-and-one-half year process of absorbing the new space coming on line by the end of 1982. A housing recovery in 1983 will be enhanced by a building surge in Arizona, with starts up 32 percent on average. The recovery in residential construction is occurring later than we anticipated six months ago, with most of it being pushed into 1983.

MOUNTAIN STATES

MT
ID
WY
NE
UT
CO
AZ
NM

Once oil prices stabilize and the "oil patch" becomes convinced that the price decline is over, a leaner, healthier industry will resume expansion at a slower, more sustainable pace. We do not expect this to occur before mid-1983 and it could be derailed either by a

Mountain Region Economic Indicators

		Estimate	*Forecast*	*Percent*	*Change*
	1981	*1982*	*1983*	*1982*	*1983*
Personal income (billion $)	116.0	126.4	139.0	9.0	10.0
Retail trade (billion $)	56.9	60.9	67.3	7.0	10.6
Unemployment rate (%)	6.3	8.3	7.5	—	—
Housing (thousand units)	102.2	92.0	121.4	—10.0	32.0
Nonresidential building (billion $)	4.6	4.2	4.4	— 8.9	5.0

supply disruption, which could send prices skyrocketing and reignite the boom, or by cutthroat price competition as small oil-exporting nations increase production to maintain revenues in the face of price declines. This uncertainty, more than the level of oil prices, is what is constraining the Mountain region's growth outlook. The rest of the energy industry will be heavily influenced by the movement in oil prices. Oil shale production is unlikely to expand until the next oil price surge.

Renewed growth in the high-technology industries will provide impetus to the economies of Colorado and Arizona. Tourism will pick up as the national recovery accelerates. Trade and services will continue to expand, gaining momentum as the recovery spreads. Overall, 1983 is shaping up as a good year in the Mountain region, although not a great year. Recovery in areas heavily dependent on copper, molybdenum and steel is not on the immediate horizon but, fortunately, these industries provide a minor portion of the regions total economic base.

The Pacific

Joseph A. Wahed

Wells Fargo Bank, N.A.

AK
WA
OR
PACIFIC
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Early in 1982, the following statement was made regarding the economy of the Pacific states:

> "The immediate prospects remain poor. The hoped-for recovery later in 1982 may still take place but it will be weak and spotty. This is largely due to the record level of interest rates and to the highly uncertain financial environment nationally. At best, a bona fide recovery is doubtful before 1983."

As the year drew to a close it was clear that economic events pretty much supported that statement. Sluggish sales and disappointing new investment continued to characterize the Pacific states' key industries such as forest products, agribusiness, tourism and aircraft. Weak export markets and an overvalued dollar hurt the region's important foreign trade-related businesses. As expected, only the defense sector continued to buck the trend. In fact, were it not for this, the number of unemployed in the region would have been much higher. During the fourth quarter of 1982, unemployment continued to rise and reached an estimated 1.8 million.

Still, there are some hopeful signs on the horizon. Early indicators show that the economy is in the process of turning round, albeit at a very slow pace. The first evidence is in the real estate market. Builders and brokers in October and November were reporting an improved flow of traffic in housing tracts in California, and sales of single-family homes edged up. Housing permits for future construction in the third quarter of the year totaled nearly 36,000—up 72 percent from nearly 21,000 in the first quarter. Developers are back developing and mortgage lenders are back lending. Interest rates have fallen substantially, especially for FHA- and VA-insured loans. The mood has definitely changed in the housing market but no one is expecting a boom in 1983. This improvement in the housing market, here and elsewhere, will help the region's still hard-hit forest products industry although industry leaders are not anticipating any major pickup in orders and output until 1984.

Some scattered strength is also discernible in the Pacific states' consumer markets, but the evidence is still too spotty to mark a trend. In November, department stores reported rising sales, while auto dealers had one of their best months in well over a year. A recovery in consumer spending is a sine qua non for a continued business pickup in 1983 and this recent strength is definitely encouraging. Lower interest rates for auto loans and an improved financial position of consumers helped to spark this turnaround—outweighing (so far at least) the very negative mood arising out of job insecurity and high unemployment. News of plant closings (in autos, food processing, steel, cement, etc.) and large layoffs have taken their toll on consumer psychology, but the worst is probably nearly over. Tourism has held up a little better than expected in Oregon and Hawaii but many resorts are still reporting low hotel occupancy rates. Other industries—in the Pacific states—

agribusiness, nondefense manufacturing, and nonresidential construction—were still hurting in late 1982 with hardly any sign of improvement.

To sum up: The year 1983 is shaping up to be a slightly better one for business than 1982. Interest rates are widely expected to fall another 150 to 200 basis points while inflation will hover around the 5 to 6 percent range. The Pacific states will also continue to benefit from rising defense procurement and R&D in California and Washington, and from an improvement in housing and consumer markets. As a result, many corporations will benefit from rising profit margins and improved efficiency as their sales increase and their costs stabilize.

Many challenges remain. These include financial strains arising out of large deficits (nationally and locally). In addition, a high level of unemployment will plague families and restrain retail spending. Because of these two forces, and their repercussions on other sectors of the economy, the recovery in 1983 will be slow and hesitant and not fully satisfactory.

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Research Bulletin

The Economic Outlook, 1983

Summary of an Outlook Meeting of
The Conference Board Economic Forum

The Conference Board

number 128

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*Unable to attend meeting of November 17, 1982

Guests at the Forum, November 17, 1982

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CHARLES B. REEDER
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Report on the Conference Board Economic Forum

Albert T. Sommers

Meeting for its regular annual forecast of the economic outlook for the year ahead, The Conference Board Economic Forum has described prospects for a gradual but persistent recovery of business conditions beginning almost immediately, and continuing throughout 1983. The views of the Forum members are unusually widely dispersed. Many expect real growth during the year to be 2 percent or less; just as many expect it to be over 3 percent. Our generalist, dealing with the economic outlook as a whole, expects about 2 percent, even though he assumes (and urges) a very large further reduction in interest rates. Our average view for 1983 is for growth of about 2.7 percent. Our views for the inflation rate of 1983 show a much more definite central tendency, with a clear preponderance at somewhat below 5 percent. But we are nearly unanimous in expecting recovery to start in the immediate future; a majority expects that when all the analysis is done, a turn to expansion will be found to have occurred in late 1982, even though we do not expect any appreciable change in the level of output in the fourth quarter of 1982 itself.

The issue revealed by the Forum's meeting is not whether growth will occur; it is the rate of growth, which the members describe as falling substantially short of normal expectations for the first year of a business cycle expansion. We envision a growth rate of over 8 percent in personal consumption expenditures in current prices, which would suggest a real increase of about 3 percent. We expect a substantial increase in the level of residential building activity, amounting to over 30 percent, in current dollars, and producing a residential building rate, in current dollars, roughly $60 billion higher by the end of 1983 than the current rate. And we anticipate that a moderate amount of inventory rebuilding will add about $20 billion to dollar demands in 1983, relative to inventory demand in 1982. We also expect a continuance of substantial growth in defense, at about the rate prevailing in 1982.

Albert T. Sommers
Senior Vice President and Chief Economist
The Conference Board

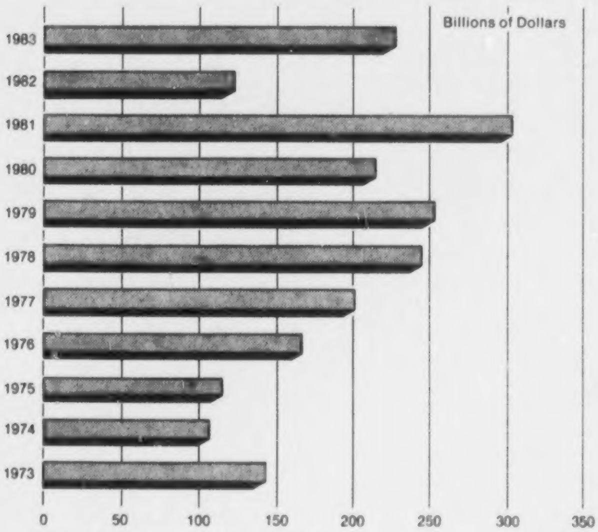
These strengths in our views of 1982 are, however, substantially offset by a major decline in the net export position of the U.S. economy, and by virtually no increase in the dollar outlay for plant and equipment expenditure, indicative of a significant continuation of the decline in real plant and equipment spending that began at the end of 1981. Moreover, we expect only a very small rise in dollar outlays of state and local governments, which again would suggest a decline in their real demand for output.

Finally, the real growth we envision leaves unemployment as a continuing pressing issue; our expectations for the year put the average rate only fractionally below 10 percent, and leave the rate at the end of the year at about 9.5 percent, no lower than the prevailing rate in the second quarter of 1982.

Our conservatism with respect to a year that would produce vigorous recovery, under normal cyclical conditions, with several quarterly growth rates far in excess of 5 percent, reflects deep concern over the monetary and fiscal bewilderments that surround us as the year is about to begin, as well as a deep concern over the impairments confronting all developed economies mired in the same worldwide recessionary condition. Our meeting produced no serious discussion of a further decline in U.S. output; no talk of worldwide depression; no expectation of near-term return to accelerating inflation. In the end, we have simply heavily qualified the cyclical prospects for a fast and highly stimulative resolution of the issues confronting policy. Our con-

The Conference Board's Economic Forum met on November 17, 1982 for its year-end examination of business and economic conditions in the year ahead. In an effort to provide you with the highlights of this important session as promptly as possible, the Board has prepared this concise report on the Forum's findings, including the summary by Albert T. Sommers, the Board's Chief Economist and Chairman of the Forum, and selected quotations from each of the participants. Data for 1983, appearing in the economic model and in the charts, reflect the collective judgment of the Forum, and are not necessarily identical with the views expressed by individual sector specialists.

Year-to-Year Dollar Changes in Gross National Product



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983).

servatism reflects uncertainty over the course of interest rates, which as a group, we consider to be still substantially too high in the light of the decline in the inflation rate; and over the prospects of achieving control over budgetary prospects in 1983 and ensuing years. The concerns that lead to this moderate forecast are not, generally, a sense of exhaustion of markets, or of past overextensions; they concern the resolution of policy dilemmas—interest rates, the budget, the dollar—and of the capacity of the rest of the developed world to respond with growth in their own markets in 1983. In many respects, these issues converge on the state of financial and capital markets, and their capacity to handle the immense public and private demands for funds that appear to lie ahead.

Expectations for Sectors

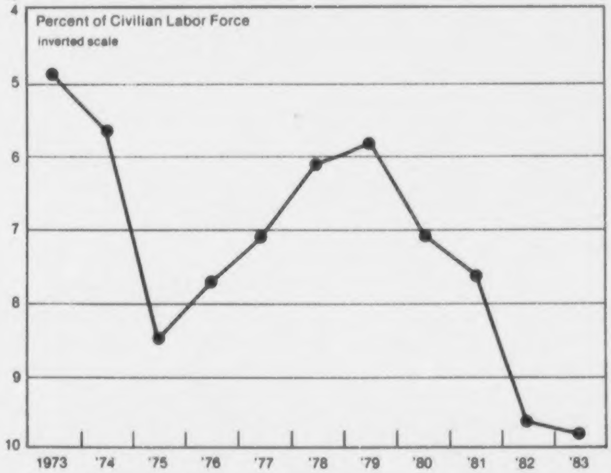
Our expectations for personal spending are a relatively strong component of the Forum's conclusions, with an increase in consumption in 1983 cyclically swollen beyond normal trend increase. Our specialist expects a rise in real spending at about a 3.5 percent annual rate, which would suggest an increase in dollar outlay of a little over 8 percent. The restraints on personal outlay in 1983 include a long pause in the growth of net worth in the personal sector, and cautious attitudes toward the future. Nevertheless, the coming gains in real income will affect long-run income expectations, and the stocks of durables in particular should resume their growth, assisted by the tax reduction due at midyear. The comments of our generalist on the outlook for personal consumption generally support these views, although he expects a slightly lesser growth of real income, and of real spending, and requires a considerable further decline in interest rates to support more aggressive resort to credit by consumers.

Our spokesman on the subject of business fixed investment envisions a rise in dollar outlay of 3.5 percent, which would equate with a decline of about 2.5 percent in the real rate of outlay. He confesses that this expectation is somewhat hopeful; it runs in the face of the absence of any current indicators of a recovery, a shrinking carryover of uncompleted projects, extreme conservatism in the views of business executives, and a probable modest decline in outlay for pollution control. Virtually every component of the capital goods industry remains in weak condition; what strength there is resides in the markets for communication equipment, electronics, instruments, and office furniture.

On the other hand, he notes that profits will be significantly higher in 1983, and borrowing costs lower. There is a substantial need to modernize the existing capital stock, particularly in light of the prospects for slower future growth in the labor force. The largest negative facing capital spending in 1983 is the low level of operating rates, which must rise 4 to 6 percent above current levels before any improvement in capital outlay can be expected. Once such improvement begins to appear, attitudes toward capital outlay will start to improve, but actual improvement in real spending should no longer be expected before the middle of 1983.

Our spokesman on the subject of business finance is even more conservative in his views on capital outlay. The outlook among producers of both capital goods and consumer goods is still deteriorating. The incoming order

The Unemployment Rate



Sources: U.S. Department of Labor; The Conference Board Economic Forum (for year 1983).

rate "leaves little room for optimism" on capital goods or corporate profits.

With respect to the housing industry, the Forum is virtually unanimous in expecting substantial improvement. Our specialist in housing looks toward an annual starts rate for 1983 as a whole of between 1.4 and 1.5 million. While this will still leave the housing industry far below the level of 2 million units achieved a decade ago, it will nevertheless mark a substantial resurgence. To reach the forecast annual level, starts must approach a 1.6 million annual rate by late 1983, an increase of over 50 percent from the estimated prevailing rate in the fourth quarter of 1982. Fulfilling this expectation will require a moderately favorable general economic environment, continued restraint in inflation, and a stable financial environment. The Garn-St. Germain legislation will contribute broadly to the strengthening of thrift institutions, and the appearance of nontraditional mortgage lenders in the mortgage-money market will contribute to the housing recovery.

As a group, the Forum expects a modest rebuilding of inventory in 1983—no cyclical explosion, but some recoupment of inventory levels as production and final demands increase. About $13 billion of inventory has been liquidated in the course of 1982; even modest, unspectacular return to accumulation, resulting from lower carrying costs and higher operating needs, would add as much as $20 billion to the total demands of 1983 relative to 1982. Because of its relationship to ongoing output, inventory accumulation should be expected to be greater in the second half than in the first half, lending some upward tendencies to the quarterly growth rates of output in that year.

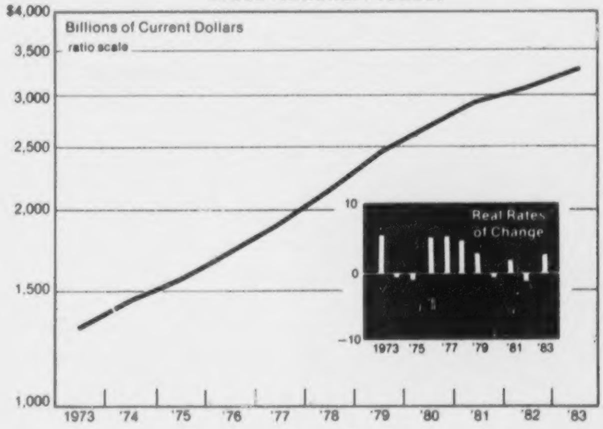
Our spokesman on the subject of the government sector expects that little can be done to control expenditures in calendar 1983, when the deficit will reach approximately 5 percent of GNP, even in the presence of real growth in private outlay. With respect to defense spending, the budget estimates appear actually to be below the emerging realities; significant cuts would be required to get to the basic Office of Management and Budget estimates of defense outlay on which the GNP estimate for this component must be based. The relatively rapid rate of defense outlay experienced in 1982 is thus likely to continue into 1983. Nor does our expert appear to expect any substantial deceleration of nondefense outlay within calendar 1983. Aggregate federal spending may add as much as $35 billion to aggregate demands in 1983.

Our discussion with respect to state and local outlays has focused on the serious financing problems confronting these governments in the presence of recession, and some decline in federal aid. Our expectations appear to be for a very slow rate of growth of dollar outlay, and, in fact, a mild continuation of the decline in real outlay that has affected this sector sporadically since early 1981.

Finally, our expert on the international outlook has produced a climactic description of a general subsidence in the U.S. export position. He notes that the decline in our export position has been among the largest factors in the decline of total U.S. output during the recession—larger than the decline in housing itself. The customary improvement in the trade balance that normally occurs in the course of recession has undergone a vicious reversal this time around. The explanation rests largely on a "massive overvaluation" of the dollar's exchange value, which has seriously eroded the U.S. competitive position in world markets. Our spokesman places the overvaluation at about 20 percent, persisting for over a year. These conditions have already impaired our trade results, but continued impairment, at as much as a $40-billion annual rate, appears to lie ahead. In terms of annual averages, our trade relations with the rest of the world, as expressed in the "net exports" component of gross national product, may experience a decline of over $35 billion, in current prices.

A summary of the consequences of these sector forecasts appears on page 6. Modification of the views of the individual sector specialists has been made, in the light of the views of other members of the Forum, and also in order to reconcile the sectoral estimates with our expectations for aggregate economic activity, as drawn from our traditional poll. The results reveal substantial prospective strength in residential building and in defense; moderate strength in outlays for consumer durables, and in personal consumption as a whole; substantial continuing weakness in plant and equipment spending, at least until midyear, and in the outlays of state and local governments, apparently throughout the year; and a vicious reversal into deficit in our merchandise trade balance, and in our net export account as a whole. In aggregate, the total volume of business, the gross national product, in current dollars—should in-

Gross National Product



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983)

Table 1: GNP Model by Sector, 1981-1983
(Billions of Dollars)

					Percent Changes	
		1981	1982	1983	1982/1981	1983/1982
1	GROSS NATIONAL PRODUCT	$2,938	$3,060	$3,296	+ 4.2%	+ 7.7%
2	Personal Consumption Expenditures	1,843	1,969	2,130	+ 6.8	+ 8.2
3	Durables	235	239	263	+ 1.7	+ 10.0
4	Nondurables	734	763	815	+ 4.0	+ 6.8
5	Services	874	967	1,052	+ 10.6	+ 8.8
6	Gross Private Domestic Investment	472	430	487	— 8.9	+ 13.3
7	Residential	105	97	131	— 7.6	+ 35.1
8	Nonresidential	346	347	350	+ 0.3	+ 0.9
9	Change in Business Inventories	21	—14	6	...	...
10	Net Exports of Goods and Services	26	16	—11	...	...
11	Government Purchases of Goods and Services	597	645	690	+ 8.0	+ 7.0
12	Federal	229	256	289	+ 11.8	+ 12.9
13	National Defense	154	179	208	+ 16.2	+ 16.2
14	Nondefense	75	77	81	+ 2.7	+ 5.2
15	State and Local	368	389	401	+ 5.7	+ 3.1
16	PERSONAL INCOME	2,416	2,572	2,740	+ 6.5	+ 6.5
17	Personal Tax and Nontax Payments	387	396	394	+ 2.3	— 0.5
18	Disposable Personal Income	2,029	2,176	2,346	+ 7.2	+ 7.8
19	Interest and Transfers	56	61	62	+ 8.9	+ 1.6
20	Personal Saving	130	146	154	+ 12.3	+ 5.5
21	Saving Rate (%)	6.4%	6.7%	6.6%	...	...
22	CORPORATE PROFITS BEFORE TAX	232	176	213	— 24.1	+ 21.0
23	Inventory Profit	25	10	12	...	...
24	Capital Consumption Adjustment	17	9	0	...	...
25	Profits from Current Production	191	157	201	—17.8	+ 28.0
26	Corporate Tax Liability	81	57	70	—29.6	+ 22.8
27	Corporate Profits After Tax	151	119	143	—21.2	+ 20.2
28	Dividend Payments	65	70	73	+ 7.7	+ 4.3
29	Retained Earnings	86	49	70	—43.0	+ 42.9
30	PHYSICAL OUTPUT (GNP in 1972 $; SAAR)	1,503	1,477	1,517	— 1.7	+ 2.7
31	GENERAL PRICE INDEX (1972 = 100; SA)	195.51	207.24	217.29	+ 6.0	+ 4.8
32	UNEMPLOYMENT RATE (%; SA)	7.6%	9.7%	9.8%	...	...

Note: Components may not add to totals, owing to rounding.

Sources: U.S. Department of Commerce; projections for 1982 and 1983 by Forum participants, with some Conference Board interpolations.

crease 7.7 percent, which marks substantial improvement over the increase experienced in 1982. Our expectations are that corporate profits should increase substantially in the presence of this increase in the dollar volume of business—our specialist in plant and equipment spending suggests 25 percent, and our generalist expects about the same amount. This would be a marked recovery from the depressed earning levels of 1982, but would yield an aggregate profits figure, in dollars, not yet back to the level prevailing in 1981. Given our expectations for gross national product, the sharp increase in corporate earnings implies only a moderate increase in personal income. This, in turn, reflects a relatively low rate of wage increase; a lower increase in unemployment payments and other transfers; and a lower rate of increase in interest income, offset by a cyclical uptrend in employment itself. The rise in consumption outlay in the model is faster than the rise in personal income, and the saving rate actually declines slightly, despite further tax reduction. The decline in the dollar volume of personal saving is, of course, offset by a sharp rise in corporate saving, in the form of retained earnings and rising depreciation. Characteristically for a year of business cycle recovery, the expenditure strength is in the consumer sector, while the fastest recovery of income is in the business sector, whose response in the form of capital outlay is deferred.

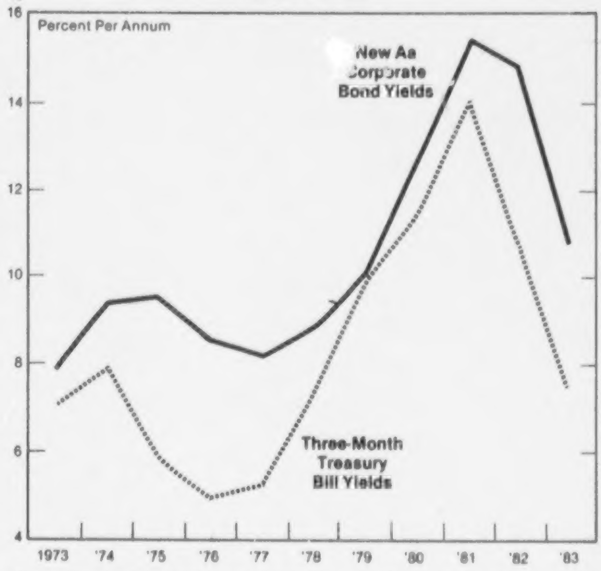
I turn now to our discussions of the general environment in which we expect this recovery to proceed, and our deep uncertainties with respect to so many of the policy variables involved.

Superseding all other issues influencing our views of 1983 are two front-and-center concerns in national economic policy: the course of interest rates, and the closely related subject of the cost of the federal deficit. Our views on these issues have shaped our views of a number of related issues: the prospects for inflation ahead; the inflation-unemployment trade-off; the high volatility of our financial markets; the prospects for reduction in the cost of capital; the behavior of the equity market in 1983; the behavior of the dollar and its effects on our export markets.

The probable course of Federal Reserve policy, and its reflection in interest rates, have dominated our policy discussions. Our generalist, whose own model is modestly below our consensus, requires a further substantial rate reduction, even up to a 500-point drop, to uncover the strength he needs to reach a 2 percent real growth rate in 1983. He points out that there has been no decline in real rates; inflation has fallen as fast as the rates themselves. The Federal Reserve should do "whatever is necessary" to arrive at a 9 percent prime rate within 1983, and a level lower than that by year-end. The existing increase in M_1 and M_2, if maintained, would suffice to achieve his own model, which calls for a 6.5 percent increase in nominal GNP.

Our monetary specialist is more cautious. He accepts the fact that the Federal Reserve has, for the time being, substantially reduced its commitment to the money-stock data. But he describes the Federal Reserve's attitude as "wait and see" and ascribes to it a natural reluctance to lower rates substantially in the presence of high growth in the money aggregates. He does not see an abandonment of monetarism; such an abandonment would carry a clear inflation danger. He does not think that long-term corporate bond yields will fall below 11 percent, a level perhaps 150 points lower than the prevailing rates. The decline in rates will have run its course before the end of 1983. The relationship of money growth to inflation is now a matter of "general agreement"; the Federal Reserve cannot allow the aggregates to convey the impression of loss of control. His word for the Federal Reserve's behavior in 1983 is "pragmatic," not "accommodative." Our poll on these questions reveals an uneasy consensus, close to the description of our monetary specialist. At the end of 1983, our consensus is for a Treasury Bill rate between 7 percent and 8 percent; as a group, we expect it to be rising at the end of the year. For the Aa corporate bond yield at the end of 1983, we seem to expect between 10 percent and 11 percent. Our inflation expectations would thus produce a real interest rate of about 6 percent at the end of 1983—roughly double what is taken to be the historical norm.

Interest Rates



Sources: U.S. Department of the Treasury; Federal Reserve; The Conference Board Economic Forum (for year 1983).

Our capital markets specialist also retains a considerable degree of monetarist caution. The Federal Reserve has created an easier monetary environment, which markets have accepted with a "sigh of relief." Nevertheless, the Federal Reserve must be watching the growth of money with some concern; if the pace quickens, the Fed would get "nervous." The federal deficit still confronts the Federal Reserve with a formidable problem, and commodity markets will almost surely turn up as recovery begins. The demand for capital in 1983 will be very high; so will real rates. A heavy concentration of the participants in bond markets remember 1980, when yields turned rapidly upward to new peaks with business recovery from the brief recession early in that year. Our spokesman on the subject of business finance, who reports that the outlook for 1983 is still deteriorating among consumer and capital goods industries alike, argues that the cost of capital is a dominant influence on new investment, and that the present level of long-term capital costs is constraining the demand for capital, and inducing reductions in capital requirements.

As a group, but with several of us dissenting, we seem to expect a Federal Reserve still constrained by the prospect of a revival of inflation operating in a financial market that still carries the fear of such a revival. It is evident from our discussions that the expectation that interest rates will not fall dramatically further limits our expectations for growth, and prevents us from forecasting a normally vigorous cyclical recovery.

Imbedded in our discussion of monetary policy is, inevitably, the prospect for federal budget deficits, and their claim on financial markets. Our fiscal specialist expects a deficit of between $170 billion and $180 billion for fiscal 1983; if growth should be very slow, a deficit of $200 billion, or nearly 6 percent of GNP, would eventuate. He argues that in typical cyclical recoveries, it is the decline of the budget deficit that provides incremental saving for private investment; this time around, the mechanism will not work in the first year of recovery. Moreover, prospects beyond fiscal 1983 still suggest deficits in the range of $140 billion to $190 billion, or perhaps 4 percent to 5 percent of GNP. All this, despite the fact that our expert expects some social security reform, adding revenues and somewhat reducing the rate of growth of outlays. He also expects that "the President's defense proposals will be subjected to much critical scrutiny"; and that tax actions outside the social security area are also possible.

In our poll questions relating to the fiscal and monetary position, our concerns for the future fix clearly on the level of interest rates in 1983, and the budget deficit beyond 1983. Virtually all of us argue that real interest rates have been a major source of our troubles, and virtually all of us would vote to "do more to lower interest rates." None of us would vote for the Federal Reserve to adopt a new monetary aggregate; fully half of us approve of continued attention to the existing aggregates. The urgencies here are for lower nominal and real interest rates.

With respect to the deficit, fewer than half of us feel that the fiscal 1983 deficit is too high, under the circumstances; we are unanimous in arguing that the deficits in later years are clearly too high. All of us would vote for close attention to the defense spending trajectory, and a large majority considers a gas tax desirable. All of us would vote for changing the entitlement indexing system; a large majority would hope for change in the social security retirement age; about half of us would hope for an increase in social security taxes. While no one argued it in explicit detail, our conversations reveal a close relationship between the trajectory of budget deficits beyond fiscal 1983, on the one hand, and the limitations of the Federal Reserve in seeking lower interest rates now. Continuing monetary stimulus now, fiscal restraint later, appears to be our prescription.

Our specialist in wages, prices, and productivity has stressed the immense impact of the recession itself on the inflation rate. While his own inflation forecast is well below our consensus, he argues that there has been no basic change in the inflation-unemployment trade-off; it is deep recession that has curbed inflation. In fact, if the inflation rate is measured as the so-called "core rate," removing such exotic elements as energy prices and mortgage interest rates, the deceleration in inflation is about the same, measured in percentage points, as the measured rise in the unemployment rate. The application of monetary policy to inflation has deeply depressed not just the business system itself; its impact in elevating the exchange value of the dollar accounts for the developing weakness in our trade position. The perverse impact of monetary constraints on the building of U.S. capital stock is such as to suggest that it will be very difficult to get the unemployment rate even below 7.5 percent; inadequate efficient capacity to accommodate growth of employment required to get the unemployment rate below that level in effect imposes a "capacity shortage" on our employment potential. His outlook for 1983 is heavily colored, apparently, by the costs imposed on the system by what he takes to be a fruitless war between monetary policy and inflation; no real or permanent results, and prolonged weakness in business conditions—prolonged, as he sees it, almost throughout 1983. What he refers to as "the basic conflict" between our inflation objectives and our unemployment objectives is still present in the system. There has been no "expectations breakthrough" that will relieve the conflict; while inflation will not become a significant problem for several years, it is mainly because there will be a major delay in general cyclical recovery. The suggestion in this material is that the equipment of U.S. economic policy, as it is presently equipped, does not possess the tools to fundamentally alter the U.S. Phillips Curve—its structural relationship between its rate of resource use on the one hand, and its inflation rate on the other.

Our international expert has pointed toward problems that run beyond U.S. economic performance in 1983. We are experiencing a downward spiral of world trade, and the outlook for the OECD, which in effect determines the level of world trade, is so poor as to suggest a continuing decline. Outside OECD, inevitable retrenchment in less-developed countries is also hurting the world economy. And there is a threat of repudiation of the enormous debts held by these countries, which would have substantial depressing effects on financial flows throughout the developed world. He reminds us that altogether apart from the U.S. outlook and U.S. economic policy, very large financial discomforts pervade the entire international scene in the early 1980's, and may well inhibit growth prospects for the United States.

Our spokesman on the subject of the equity market argues that the enormous elevation of stock prices in the past several months reflects the judgment that the Federal Reserve has significantly altered its posture, "from one of fighting inflation, to one of encouraging recovery." The market has thus far interpreted this shift in position as reducing the likelihood of still deeper recession, or of a major financial accident. The market has also apparently accepted the conclusion that inflation itself will not be a problem in 1983—the conclusion emphatically supported by our specialist in wages and prices. The market is "confidently anticipating some recovery"; the magnitude of the recovery will, at least for a while, be much less significant than the assurance that it is beginning. The equity market, according to our specialist, is betting that policy will stay stimulative, and that it has the equipment to produce recovery without inflation—at least in 1983.

Finally, our resident sociologist describes a number of important issues confronting government in the year ahead. Confidence in the Reagan Administration remains moderately high at this point, but skepticism about its methods is increasing. The "pool of patience" is eroding, and threatens to give out, absent recovery in 1983. The "unfairness" issue is beginning to politicize the groups that have fared differently as inflation has subsided and unemployment has mounted; he sees the possibility of a resurrection of "class politics," as distinguished from the "interest group" politics of the past decade. His remarks seem to underscore a sense of urgency in policy—a need to unwind the "unfair" differential consequences of our now two-year effort to rid the system of inflation.

In conclusion, the Forum has uneasily described a return to growth in 1983. But the growth falls short of the historical rates achieved following past recessions. The performance of 1983 is hampered by temporary dislocations of policy, epitomized, perhaps, by still restrictively high real interest rates, and a federal budget trajectory that still limits the options open to monetary policy. The world in which we participate is full of its own problems, and will exert a considerable drag on our future, particularly as consequences of the prolonged elevation of the dollar work their way into our trade performance, all in a slack or shrinking environment of world trade as a whole. We do not doubt that the onset of a recovery of sorts is at hand; but for all of these reasons, our forecast reflects the judgment that it will be slow going for several quarters ahead.

The Business Outlook

Charles B. Reeder

Charles B. Reeder
Chief Economist
E.I. Du Pont de Nemours & Co., Inc.

Most of the current data on the actual performance of the economy indicate that the recession is continuing into the fourth quarter, but this has not dampened the case for recovery in 1983. The key factors that will generate the long-awaited recovery are (1) a further rise in real consumer purchasing power; (2) lower interest rates; and (3) an end to inventory liquidation. The first two represent a continuation of trends already under way, and the third is an almost automatic response to the first two.

Total consumer purchasing power has been remarkably well maintained during this recession as a result of reductions in personal income tax rates, the marked slowdown in inflation, and the increasing importance of nonwage income to consumers (interest income, social security benefits, and so on). Next year, transfer payments and interest income may not rise as much as this year, but employment should rise so that wage and salary disbursements, which account for 60 percent of total personal income, will increase more than this year. Additionally, personal income-tax rates will be reduced another 10 percent next July, and inflation should continue to slacken.

These factors will combine to produce an increase of more than 2.5 percent in total real disposable personal income next year and a roughly corresponding rise in real consumer spending. This year, real disposable income will be up 1.5 percent and real consumer spending only about 1 percent.

Interest rates have dropped sharply since midsummer and presently are at levels that have not been seen since mid-1980. However, on an inflation-adjusted basis, interest rates are still near their historic peaks, and actually are no lower than they were at the beginning of the year because of the equally sharp decline in the inflation rate.

The primary cause of the recent plunge in interest rates was the announced willingness of the Federal Reserve Board to permit the money supply to grow above the upper limit established for this year, but that policy change took place in a climate of declining inflation, weak private demand for credit, and a rising personal saving rate. These latter conditions are expected to prevail in 1983, but their downward pull on interest rates could be canceled by a renewed tightening of credit by the Fed.

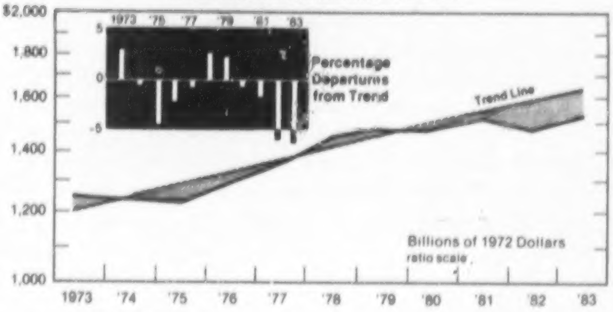
Some analysts expect the Fed to tighten credit again next Spring as the recovery gains momentum and they are, therefore, forecasting a renewed rise in interest rates. This could happen, of course, but in view of the many serious problems in the economy that are a direct consequence of high real-interest rates—reduced demand for housing and many consumer goods, faltering exports, soaring imports, high unemployment, widespread business failures, and so on—there is literally nothing to gain from an early return to tight money, and very much to lose.

Accordingly, the assumption here is that the Fed will not become restrictive again in 1983 and that interest rates will continue declining all year. These lower interest rates will have a very favorable effect on the demand for housing, autos, and many other big-ticket consumer items. Housing starts should rise by more than 20 percent next year, and sales of domestic new cars by more than 15 percent.

Business inventories have been trimmed significantly during the recession and are now so low that in some areas they could not adequately support a pickup in final demand. Since final demand is expected to rise in 1983, the inventory cycle must reverse. Just as inventory cutting this year caused the decline in production to be greater than the decline in final demand, efforts to rebuild stocks next year will require production to be boosted more than final demand. The turnaround in production should begin no later than January.

Despite these favorable prospects, the growth of total economic activity will be held down in 1983 by weakness in business capital spending and net exports. Real outlays for new plants and equipment are declining sharply now and this situation will continue through most of 1983, no matter how low interest rates fall. Part of the decline is linked to reduced investment in the energy area, and part reflects low capacity utilization rates for manufacturers. Several quarters of strong business activity will be required before a turnaround in capital spending can even be considered.

Real Gross National Product



Note: Trend line 1973 to 1981.

Sources: U.S. Department of Commerce; The Conference Board Forum (for year 1983).

The nation's trade balance is being negatively affected by the recent sharp rise in the external value of the dollar, and the worst is still ahead inasmuch as the value of the dollar is now at its highest level since 1970. U.S. exports are certain to continue declining in 1983 and imports to continue rising, with the result that the nation's trade deficit will soar. This worsening trade situation will partially counteract the beneficial effect on production and employment coming from rising domestic demand and inventory rebuilding.

Summing up, there should be genuine economic recovery in 1983, but growth will not be broad-based and the percentage increase will be small in comparison with past recoveries. Real GNP should increase by about 2 percent and industrial production by 4 to 5 percent. Although the number of unemployed will decline, the unemployment rate is expected to average above 9 percent. However, with inflation and interest rates moving downward, the recovery should easily be sustainable beyond 1983.

The Government Sector

Rudolph G. Penner

Assuming a continuation of the policies implied by the Congressional Budget Resolution for fiscal 1983, and a fairly robust economic recovery starting very soon, I project a unified budget deficit in the $170 to $180 billion range in fiscal 1983 and only very slightly below that level for fiscal 1984 and 1985. Relative to GNP, the projections imply a deficit equal to something slightly above 5 percent of the GNP in 1983, and between 4 and 5 percent of GNP in 1984 and 1985. A very slow recovery (less than 2 percent real growth 1983 over 1982) could imply a unified budget deficit in 1983 close to $200 billion.

The implied NIA deficits are huge. They are likely to be in the neighborhood of the entire amount of saving by individuals, leaving state and local saving, corporate saving, and foreign saving to finance whatever private capital formation occurs. During a recovery, significant reductions in the absolute size of the deficit are typically an important source of net saving to finance inventory accumulation and fixed capital formation. Unless policies are changed, that will not happen this time.

But, of course, policies will change. Social security reforms will add revenues and result in some reduction—perhaps small—in the rate of growth of outlays. It is becoming clear that the President's defense proposals will be subjected to much critical scrutiny. There may be tax actions outside of the social security area as well.

Rudolph G. Penner
Resident Scholar and Director
Tax Policy Studies
American Enterprise Institute

Nevertheless, it is hard to envision a set of legislative actions that would bring the unified deficit below $100 billion by fiscal 1985, unless we reinflate. This would leave a deficit in the range of 2.5 to 3 percent of GNP in that year even if a very healthy recovery is assumed. During the 1964-1981 period, deficits that high occurred only in 1968 (3 percent), 1975 (3.1 percent), and 1976 (4 percent).

The International Outlook

C. Fred Bergsten

The United States trade deficit will soar to between $75 billion and $100 billion in 1983 (in nominal dollars). This sharp further deterioration in our external sector will depress GNP by 1 to 2 percentage points. Between one and two million job opportunities will be lost as a result. Most forecasts fail to recognize the extent of these developments and thus substantially overstate both the recovery of GNP and the decline in unemployment.

Real net exports of goods and services (in 1972 dollars, as included in the real GNP calculations) have already fallen by $17.5 billion from the first quarter of 1981 through the third quarter of 1982. This decline equals about two-thirds of the total fall in real GNP over that period. This is a particularly startling development, because the U.S. trade balance has improved sharply during all previous postwar recessions.

Since early 1981, the massive overvaluation of the dollar in the exchange markets has severely undermined U.S. competitiveness in international trade. From its trough in late 1978, to its peaks of mid-1981, and again now, the dollar has risen by about 50 percent against the yen and DM and by a trade-weighted average of about 30 percent. Taking into account relative inflation rates and the excessive weakness of the dollar in late 1978, it can be estimated conservatively that the dollar has been overvalued by at least 20 percent for over a year in terms of underlying economic relationships between the United States and its major foreign competitors.

C. Fred Bergsten
Director
The Institute for International Economics

Each loss of one percentage point in U.S. prices relative to our major competitors tends to reduce our trade balance by about $3 billion. We should thus expect a total trade deterioration of about $60 billion from the current overvaluation of the dollar, of which perhaps only one-third has already been experienced. Terms of trade changes will, of course, affect the nominal number, but such a swing could take the published merchandise deficit close to $100 billion (for at least a quarter or two, at an annual rate, if not for an entire year).

Such an outcome would push the current account deficit to between $40 billion and $50 billion (in nominal dollars), three times the previous annual record (in 1977-1978) and twice the previous quarterly peak (IIIQ 1978).

The bilateral U.S. merchandise deficit with Japan would range between $30 and $40 billion. Protectionist trade pressures, which throughout the postwar period have been propelled more by dollar overvaluation (late 1960's-early 1970's, mid-1970's, now) than by any other single factor, would be greatly intensified.

At some point, this projected decline in the U.S. external account will come to dominate the exchange markets and the dollar will fall sharply. If that correction is delayed much longer, the deterioration in our trade balance will continue well into 1984, and the deficit will become even larger. On the other hand, significant dollar depreciation in 1983—which is more likely—will generate inflationary pressures on our economy. The U.S. economy may well face the worst of all worlds from the foreign sector in 1983 and into 1984: A substantial further drag on GNP and employment, and a new source of pressure for price increases.

The Social Situation

Daniel Yankelovich

Daniel Yankelovich
Chairman
Yankelovich, Skelly & White, Inc.

After returning from a recent trip to Europe, it seemed to me that U.S. consumers were a lot less hysterical and gloomy than people in England and Germany. In the United States, consumer response to the ailing economy is not a passive one, not a gloomy one. It is not really a political one either; people have not begun to politicize a lot of these issues. They still tend to see them in personal and economic terms and define for themselves the problem of how to get by in a situation that they see as difficult. There is a kind of psychic deflation that parallels the economic deflation. The feeling has been growing over the past couple of years that the problems we have were not created yesterday. And they are not going to be resolved right away. This is a much less impatient point of view than that reflected by the media.

The feeling about the President has been not only that he is well-liked, personally, but that there is more confidence in him because people consider him a person of principle. They agree with his objectives, although there has been a growing skepticism in the last few months about the methods for achieving those objectives. And there has been a growing feeling that his programs are unfair. Now the unfairness issue is going to become increasingly important. People are prepared to accept a certain amount of unfairness, for pragmatic reasons. But if the program works, the fact that it was unfair would be overlooked. If the program does not work, the fact that it is unfair suddenly looms large, and becomes a political fact of some importance.

About 60 percent of the public says that it expects the recession to go on either throughout 1983, or beyond. It has been more than a year or so now, but people have defined a year not as you might, but a year could be a four-month year, or it could be a 16-month year, depending upon the responses of political leadership and the press. I get the feeling that the pool of patience is beginning to erode, however. It showed up in the election and, I think, it is likely to give out next year. I think this would change the political situation quite a bit, and make the unfairness issue much more important. The unfairness issue is, perhaps, going to become one of the central issues in 1984.

The effects of inflation were not uniformly felt throughout the society during the 1970's. A lot of people were hurt, but a lot of other people either benefited, or were not affected. Subjectively seen, the way people themselves interpret it, you have about 26 percent over the last four or five years who consistently indicate rather significant distress. The distress indicator that we have been using is partly subjective, partly objective. It has to do with the difficulty people feel in paying their rent, their job security, and saving. But it is their own subjective interpretation. On the other hand, 31 percent feel that they are doing better than ever, and the rest are somewhere in the middle.

Throughout the period of redistribution of income in the 1970's, redistribution by virtue of inflation, you had a sense that those who were benefiting did not particularly deserve it from the point of view of any special virtue of working harder, or whatever, than those who suffered. The response of people who feel that they have been victimized is going to grow more political.

The Monetary Outlook

Norman Robertson

Norman Robertson
Senior Vice President and Chief Economist
Mellon Bank

By midsummer, the prospect of a deepening recession evidently brought about a significant shift in Federal Reserve policy. Arguably, the Fed is now paying a lot more attention to economic and financial developments, and less to the monetary aggregates. After all, the economic recovery is long overdue, business failures are still on the rise, and the danger of an international financial collapse appears greater than at any time since World War II.

Evidence of a more accommodating monetary policy is visible in the recent interest rate declines, which have already carried most short- and long-term borrowing costs to their lowest level in some two years. The drop in market rates, as well as the 2 percentage point cut in the discount rate, has been interpreted as a sign that the Fed has discarded the targeting of M_1, at least until such time as the economic recovery is firmly in place. This perception of Fed policy has also been supported by the recent rapid advance of M_1 and the Fed's willingness to sharply accelerate the growth of nonborrowed reserves.

The temporary suspension of M_1 targeting does not mean that the Fed has now embarked on a sustained easing of monetary policy. On the contrary, policy is, for the moment, in something of a holding pattern. Over the four weeks ended November 3, 1982, M_1 climbed at a very rapid yearly rate of 27 percent, and yet the federal funds rate has remained stable in the 9.25 to 9.50 percent range. What this suggests is that the Fed is reluctant to restrict reserve availability at a time when the economy is still mired in recession and M_1 growth continues to be distorted by a variety of technical factors. It also suggests, however, that the well-above-target rate of M_1 expansion is inhibiting the Fed from additional moves designed to pull interest rates downward.

What can be said about monetary policy in 1983? Considering all that has happened in 1982, the Fed is very unlikely to follow a rigid or inflexible approach with respect to targeting money growth. Since the relationship between M_1, or indeed any other aggregate, and nominal GNP has become increasingly unreliable and unpredictable, I believe that the Fed will not only watch the monetary dials, but a broad array of economic and financial developments as well. Furthermore, the Fed might also adopt wider ranges for the aggregates; develop an improved measure of M_1; or explore the greater use of multiple, as opposed to single, measures of the money supply.

A fourth quarter 1982 to fourth quarter 1983 rise of about 5.5 percent in M_1 should support a 10 percent rise in nominal GNP—including 5 percent real growth—always provided, of course, that the velocity of money stages its normal cyclical rise. Velocity, however, has become highly unpredictable, and the recent direction has been downward—the 2 percent decline in the year ending with the third quarter was the largest drop for any four-quarter period in at least 22 years. As matters now stand, anything less than a 4 to 5 percent increase in the turnover rate of money would necessitate a compensatory boost in the money supply to ensure a sustained recovery.

My own feeling is that the inability to accurately anticipate short-run movements in velocity will further encourage the Fed to take a more pragmatic approach to money-supply targeting, and thereby avoid another dangerous flirtation with monetary brinkmanship. A more accommodating policy, together with a generally subdued economic upswing and a low—5 percent—inflation rate suggests a further easing of interest rates through at least the first half of 1983. Money-market rates are seen falling to just under 8 percent, an 11 percent or slightly lower prime rate is expected, and the yield on Aa corporate bonds should settle in the neighborhood of 10.75 percent. Before the end of next year, however, the decline in rates will probably have run its course, and a firming trend can be expected in response to the quickening pace of business activity and the Treasury's enormous borrowing requirements. Finally, a return to single-digit long-term interest rates is, in my opinion, unlikely until such time as the ballooning federal budget deficit has been brought under effective control and investors are convinced that economic policy can successfully combine reasonable price stability along with strong gains in output. That time, I believe, is not even in sight.

Wages, Prices, and Productivity

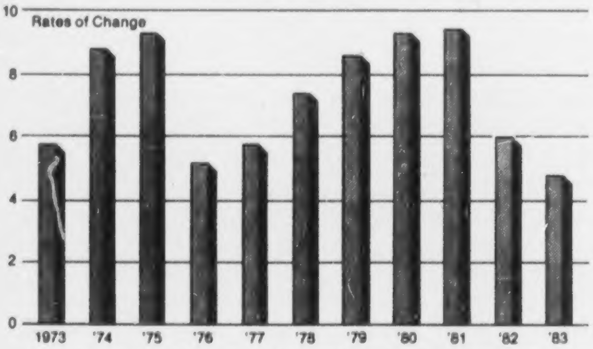
Barry Bosworth

Several years ago, there was a high degree of consensus as to the major problems that economic policy needed to address, even if there was none about the means for doing so. The major problems were: (1) the need to achieve a better balance between unemployment and inflation; and (2) addressing the problem of slow productivity growth with its implications for limited future gains in real income.

Despite the trauma of the last three years, I am surprised about how little has changed. We have traded a lower rate of inflation for higher unemployment, but the basic conflict between the two goals remains.

The decline in inflation has been faster than would have been anticipated three years ago, but only because government policy has tolerated a much more severe magnitude and duration of recession than most forecasters would have believed possible. The cost in terms of high unemployment has been quite in line with past recessions; and there has been no "expectations breakthrough" on inflation as the Administration argued in 1981.

The Inflation Rate



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983).

Barry Bosworth
Senior Fellow
The Brookings Institution

About half of the 6 percent decline in inflation (from 12.5 to 6.5) as measured by the CPI, has been due to lower food and energy price increases. Domestic wage and price inflation has slowed by about 3 percent, to an annual rate near 6 percent. That is, the inflation rate dropped back to that of 1976-1977. The cost has been, in part, a rise of unemployment from 6 to 10 to 11 percent.

We have learned that monetary policy does have significant effects on inflation other than just operating through changes in aggregate demand. For example, the impact of interest rates on inventory stocks of commodities, and the impact of interest rates on exchange rates and import prices. Domestic price inflation seems a little high in 1982, given the deceleration in wage-rate increases and the fall in import prices. I do not think inflation will be a significant problem for several years to come, because I see little chance for a major economic recovery:

Unemployment should stay in the range of 9 to 10 percent for several years, because of the conflicts over economic policy. If there should be a strong recovery, however, there are likely to be significant capacity problems and bottlenecks in present markets at unemployment rates as high as 7 to 7.5 percent.

There is little evidence of any change in the productivity situation, with the growth trend apparently only about 1 to 1.5 percent. Recent fluctuations have been due mainly to the business cycle.

Behavior of the Personal Sector

Leif H. Olsen

Because the economy has not begun a clear and unmistakable recovery from recession, the small but persistent gains in constant dollar personal consumption expenditures have largely gone unnoticed. The pickup began in February and the level of personal consumption through October is above the third quarter average. The monthly increase between January and October has been about 3 percent on an average annual rate, far below what could be termed a cyclical rebound in consumer spending. But that rebound will surely take place in the next three to six months. Whether one forecasts fiscal policy or monetary policy, the foundation for a recovery is now well in place.

Initially, the rebound in consumer spending could be strong—stronger than the moderate average increase that will subsequently occur over the longer run. It is not unusual to experience a much larger-than-trend increase in consumption and total GNP in the first or second quarter of recovery, as the velocity of money surges for a short time.

Taking a slightly longer view, the gains in real consumer outlays will be more moderate in this recovery than in past business cycle upturns. Consumer spending in the first 12 quarters of recovery will rise at a 3.5 percent annual rate, less than the pace set in the initial consumer recoveries from the 1969-1970 and 1973-1975 recessions. In those two upturns, real consumer outlays grew at 4.4 percent and 5 percent annual rates, respectively. The major components of consumption—durables, nondurables, and services—also will lag behind prior performance.

The recent acceleration in money has favorable implications for consumer spending. Individuals may soon find that their actual money balances are higher than they desire. They will run down this excess liquidity by making those long-deferred purchases of durable goods. The coming gains in real income will gradually be incorporated into long-run income expectations. The desired stock of durables will begin to rise—albeit slowly—yielding moderate gains in unit sales of autos, appliances, clothing, and so on. But a more moderate, long-term monetary policy than in past recoveries will keep the gains in real disposable personal income and consumption behind the pace set in prior cyclical rebounds.

The substantial acceleration in money growth since July should lead to high nominal and real income growth in the months ahead. The rise in both permanent and transitory income will be leveraged with higher credit usage to lift consumption of durable goods, in particular. Consumer credit outstanding as a percent of personal income has declined since 1979. Early gains in income growth will be incorporated into long-run expectations, but will only be a partial offset to the historic effects of declining real income growth on expectations.

Leif H. Olsen
Chairman
Economic Policy Committee
Citibank, N.A.

Further evidence of a damper on consumer spending in the early 1980s is the pause in the Federal Reserve's measures of household wealth in recent years. Household net worth of "ordinary individuals" increased by 4.6 percent per year from 1972 to 1978. In the three years since 1979, however, there has been no increase in net worth of this group—the longest period of no increase since the end of World War II.

Since we have had no experience in recent decades with such lengthy pauses in real net worth, it is difficult to determine how much this will retard consumer spending as the recovery in real disposable per capita income takes place. In the past, increases in net worth have accompanied increases in income and spending as consumers built up their holdings of household capital—autos, appliances, houses, home furnishings. That should occur again.

Capital Markets

Daniel S. Ahearn

The major rallies in the stock and bond markets reflected a collective sign of relief that the Federal Reserve policy has shifted away from restraint and toward active ease and lower interest rates. The markets believe that the current recession and Fed awareness of the vulnerability of the U.S. and world banking system to defaults on hundreds of billions of debt, has led to a

Daniel S. Ahearn
Partner
Thorndike, Doran, Paine
and Lewis

decision to provide lower interest rates and a more comfortable financial environment for hard-pressed debtors and the worried creditors holding their paper. In addition, substantial political pressures for lower interest rates are reflected in significant bipartisan support for a variety of new bills in the Congress aimed at encouraging the Fed to adopt interest-rate targets. All this had led many market participants to believe that the current accommodative monetary posture will persist for a long time.

There are a number of reasons why complacency about a sustained posture of monetary ease is unwarranted and why, therefore, the capital markets are unlikely to be one way streets to higher prices and lower yields. The large declines in interest rates since June are themselves powerful stimulants to consumer buying and to business activity, as is the big rise in money growth rates, and the hundreds of billions of value added to consumer and business balance sheets by the major increases in stock and bond prices. All this adds to the likelihood of economic recovery before long, and economic recovery would remove one of the pressures which has led the Fed to accept outsized money growth rates.

Second, International Monetary Fund (IMF) rescue packages are being provided for the major problem debtors: Mexico and Argentina, with Brazil next on the list, and many other smaller debtors. While such assistance is only a first step, it was essential to eliminate the rising concern about possible unmanageable default emergencies. There remain very large uncertainties, since only time will tell whether the populations of politically and socially volatile Third World and Eastern Bloc nations will accept many years of austerity and reduction of already low living standards to pay debt service to foreigners, or whether they will seek to change their governments. Nevertheless, the IMF credits and associated loans from central banks and commercial banks have eliminated the forebodings of imminent collapse that made a Federal Reserve policy switch to ease so important in early July. The monetary authorities therefore have now regained a little more freedom of action.

Third, the acceptance by the Fed of very high monetary growth rates has been rationalized by the maturity of All Savers' Certificates, which would artificially quicken the growth of M_1. While this is a plausible technical explanation, it is probably not the whole story, which almost certainly involves a real shift in policy related to the international debt problem and the sluggishness of the recovery. The Fed authorities will be watching the monetary growth rates closely to try to determine to what extent they also incorporate a genuine quickening, related to the sharp lowering of interest rates. From this perspective, the larger than expected 8 percent growth in October for the more inclusive M_2 aggregate (which is not inflated by All Savers' Certificates) in the midst of a very weak month for the economy is a worrisome sign. Should recovery begin strengthening the monetary aggregates, such a quickening would start from an extremely high 10 to 20 percent growth base. There is not much room for error here in an economy and a financial marketplace that still remember double digit inflation.

Fourth, the federal deficit is still a major problem, with deficits beyond $150 billion, and possibly beyond $200 billion, stretching out to the horizon. Financing the deficit this Summer and Fall has not been a problem, but only because the environment was one of recession, easing Federal Reserve policy, and a worldwide flight to high-quality U.S. Treasury obligations. It is hard to overestimate the influence of an easing Fed policy in the financial markets. The deficit is likely to be a strong force for higher interest rates in a nonrecessionary economy in which Fed policy is no longer easing.

Business Investment

Robert H. Vatter

The outlook for business fixed investment in 1983 is rather bleak. The only debatable point appears to be how steep the decline will prove to be in real terms. I look for a rise of 3.5 percent in current dollars, which translates into a decline of 2.5 percent in real terms. The consensus forecast is not as "optimistic," and should my expectations for a 3.5 percent real GNP gain and a 5 percent rise in industrial output prove high, investment will obviously pan out lower.

The big negative for capital spending is low operating rates. They will have to rise 4 to 6 percent above current levels before manufacturing investment starts improving. That seems unlikely until the second half of next year.

Robert H. Vatter
Vice President and Economist
Metropolitan Life Insurance Co.

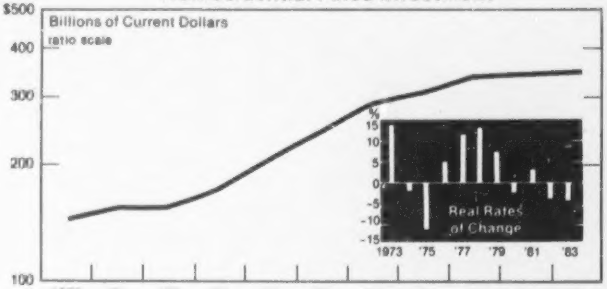
Carryover for manufacturers and utilities—that is, capital expenditures still to be made on projects already under way—also will not cushion the decline as much as during the mid-1970's.

Once recovery becomes more visible, business optimism will improve, and the typical pattern of upgrading spending plans will occur. Confidence will be helped by a sharp rise in 1983 profits, perhaps 20 percent or more. Aggressive cost cutting and work force reductions have positioned business for sharp earnings improvement when sales turn up.

Another positive development is the significant decline in borrowing costs. While the more dramatic part of the rate decline is behind us, some further moderate reductions for short rates through early Summer and for long rates through late 1983 seem likely.

Among producers' durable goods, farm equipment sales will be poor because of the distressed condition of agriculture and large supplies of used equipment available. Other weak areas include aircraft, and railroad, mining, and oil drilling equipment. Areas which should do reasonably well in 1982 are communications, electric transmission and distribution equipment, instruments, and other items associated with the high-technology and defense industries. Sales of office equipment and furniture should remain relatively strong, as new space comes on stream and office automation continues.

Nonresidential Fixed Investment



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983).

Manufacturing plant construction will unquestionably be down in 1983. Office construction has been booming for five years, but with large supplies of space emerging and contract awards already down this year, it should taper off as 1983 progresses and remain weak into 1984. Petroleum construction, which represented 25 percent of nonresidential construction in 1982, also is slated to drop.

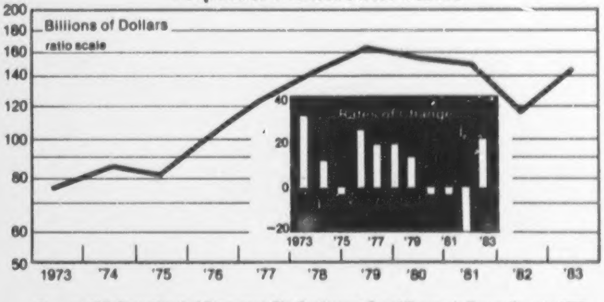
Business Finance

John T. Hackett

The business community, and particularly the manufacturing sector, is puzzled by the recent optimism in the equity markets. Among manufacturers of both consumer and capital goods, the outlook for 1983 is deteriorating. The incoming order rate, capacity utilization rates, inventory liquidation, and an absence of increases in consumer and capital spending, leave little room for optimism regarding corporate profits next year.

John T. Hackett
Executive Vice President and
Chief Financial Officer
Cummins Engine Company, Inc.

Corporate Profits After Taxes



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983).

Many corporations, however, have taken advantage of the recent decline in interest rates and have issued long-term fixed rate debt to refinance short-term floating rate debt. In addition to improvements in corporate liquidity, there are widespread efforts to improve corporate cost structure by reducing break-even points and eliminating overhead expenses. Reductions in working capital requirements have also been realized through cooperative efforts between equipment manufacturers and their component suppliers to improve inventory management. However, the full impact of improvements in operating costs is not expected to be visible until an economic recovery has been achieved.

Although corporate management may have difficulty understanding the rationale of the current stock market rally, it may not overlook the opportunity to further strengthen its balance sheets by issuance of additional common stock if equity prices continue to advance. Nevertheless, given the current state of the economy, corporate profit margins are not expected to improve significantly before 1984.

The Housing and Mortgage Financing Outlook

Saul B. Klaman

Saul B. Klaman
President
National Association of Mutual Savings Banks

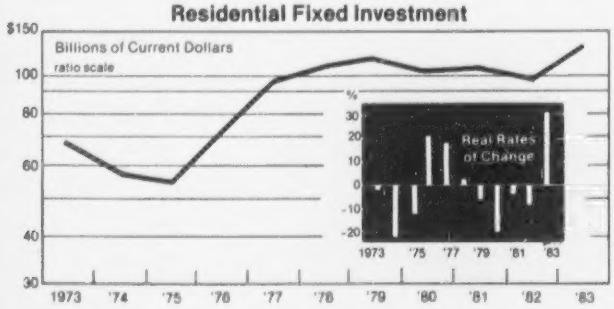
The housing industry, severely depressed for nearly three years, is poised for recovery in 1983. Indeed, housing sales and starts are already on the upswing in response to declining interest rates, stable to lower housing prices, and an unleashing of deferred demand.

The 1983 rebound will be limited, however, by continued high unemployment, continued lender emphasis on liquidity, and the lead time needed by builders to gear up for increased production. In short, 1983 will be a year of transition for housing, in which the foundation could be laid for a long-run sustained expansion.

From the abnormally low level of 1.1 million units in 1982, starts will increase to the 1.4 million to 1.5 million level in 1983. This gain will still leave housing activity well below the 2 million unit level first achieved more than a decade earlier, at a time when such a level was considered a minimum to meet America's housing needs.

Whether the foundation for sustained housing expansion will be laid in 1983 will depend almost entirely on the course of economic events. A continued sluggish stop-and-go economy, with much higher than usual unemployment, would clearly restrain potential housing demand. So also would an upturn in interest rates in response to economic recovery, reviving private credit demand, and a massive $150 billion to $200 billion federal budget deficit. Either environment would almost certainly rule out a sustained housing recovery. The essential foundations for a strong housing market are a relatively noninflationary economy, a stable financial environment, and a healthy thrift industry.

Residential Fixed Investment



Sources: U.S. Department of Commerce; The Conference Board Economic Forum (for year 1983).

The landmark Garn-St. Germain Depository Institutions Act of 1982, signed into law on October 15, might well be the most important positive long-run development for housing and mortgage markets. Thrift institutions, the backbone of housing finance in the United States, have been provided with both short-run capital assistance and long-run balance sheet restructuring. Beginning on December 14, they will be offering a new, ceiling-free, money market deposit account likely to attract billions of dollars back from the money market funds. And in the years ahead, both savings banks and savings and loans—essentially united into one industry by this Act—will be broadening their asset and earnings base beyond the housing finance area. This will markedly reduce their vulnerability to interest rate volatility and greatly increase their ability to make mortgage loans in high interest rate periods.

The Equity Market

Robert G. Wade, Jr.

The extraordinary rally in the stock market since August 12, 1982, is properly viewed as a response to lower interest rates, and serves to remind investors that the availability and cost of money is a primary ingredient of stock prices. However, this analysis stops far short of explaining the magnitude and violence, if you will, of the last three months' equity markets.

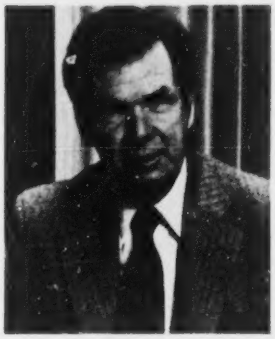
The decline in rates, particularly long rates, provided the market with the opportunity to believe that there will be some recovery. Prior to this decline, it was the view of many economists that no recovery was possible.

At the same time, the perception emerged that the Federal Reserve Board had significantly altered its posture from one of fighting inflation to one of encouraging recovery. This served to reduce sharply the likelihood of depression or major financial accident in the eyes of equity investors. The ability to describe in detail how the U.S. economy was sliding into depression had grown sharply during 1982.

An additional ingredient in the equation was the belief that, over the next year or so, inflation cannot be a problem. This attitude was necessary in order for bond rates to come down and stay down. In effect, the stock market believed that the inflationary expectations of the bond market had subsided and were unlikely to be aroused for a reasonable period of time.

It is important to remember that while the stock market has been advancing, interest rates have continued to decline so that the equity risk premium has only slowly been eroded. In other words, in spite of a sharp rise in equity prices, their relative attractiveness to bonds remained positive.

It is difficult for many people to understand why the stock market should be so bullish while the economic news remains so bad. It illustrates the ability of the market to discount and anticipate events; and, in this case, it is confidently anticipating some recovery. The stock market's record in this area is pretty good, but not infallible. At present, the magnitude of the recovery is not important, and most of the stock market's bets are being made away from those companies that are acutely sensitive to economic activity. The market so far has been increasing the multiple on companies whose earnings are thought to be fairly predictable and that are generally benefited by disinflation.



Robert G. Wade, Jr.
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We would expect that, by early 1983, the magnitude of the recovery will become important as the market tries to anticipate earnings increases. In the meantime, the market has been fueled by the enormous amount of cash that has been left on the sidelines. As it starts to correct, this cash rushes in to buy, so each decline is brief. Barring some dramatic negative news, it is difficult to see much risk at present levels until this anxious cash has been invested.

Obviously the market cannot continue at this pace. We would expect a period of consolidation that could last several months. However, assuming that this recovery continues through 1983 into 1984, the stock market should be higher a year from now.

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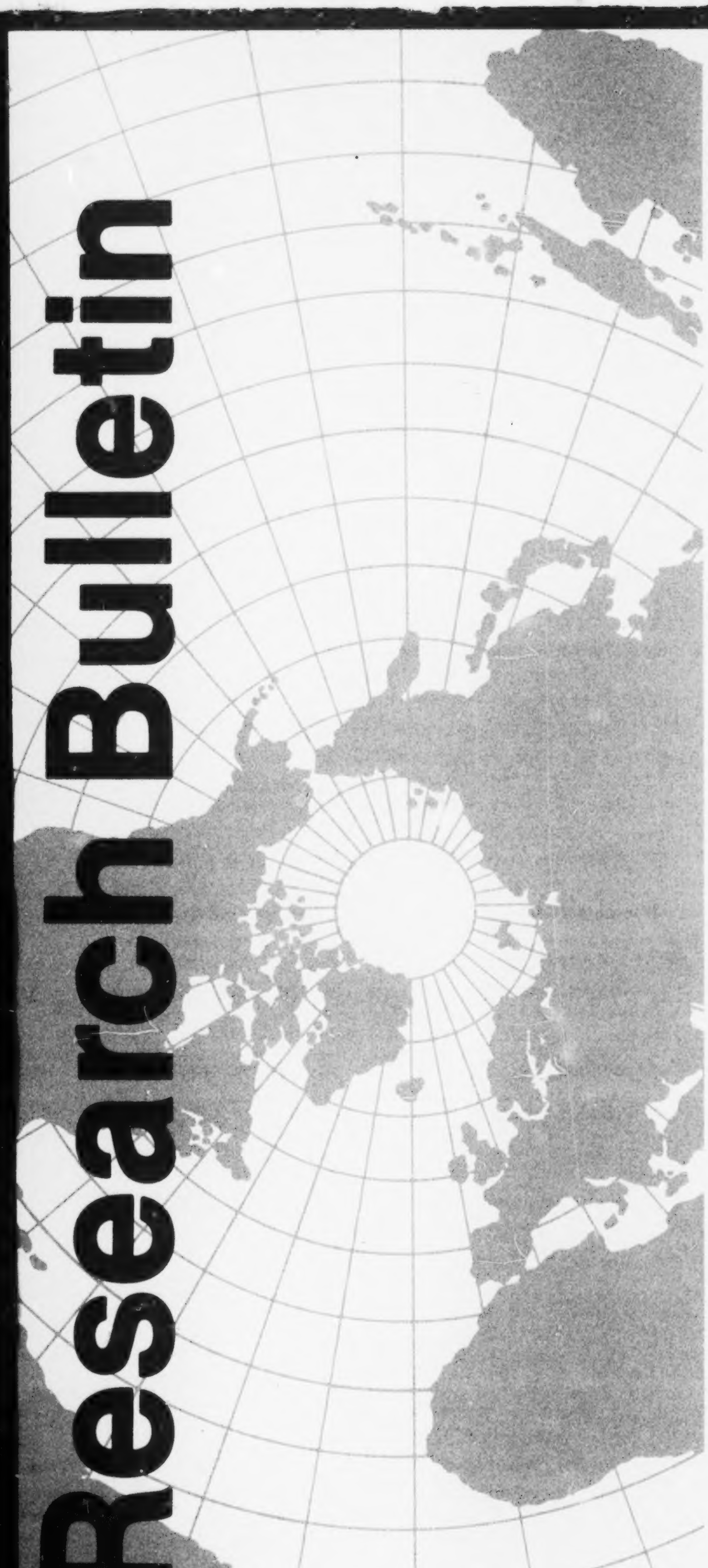

Research Bulletin

Technology Imports Into the United States

by James R. Basche, Jr.
Senior Research Associate

The Conference Board

number 129

BEST AVAILABLE COPY

Technology Imports Into the United States[1]

Introduction

Technology transfer has been the subject of numerous newspaper articles, academic studies, and government reports. Most of these see the transfer process as a river flowing from developed countries (the sellers of technology) to less-developed countries (the buyers). Rarely is the process viewed as tidal waters flowing in both directions at various times.

Technology transfer is more often considered an export than an import, and very little attention has been given in the United States to the import of technology. Indeed, a computer search of several bibliographic data banks that preceded this study turned up fewer than a handful of articles (other than short news reports) discussing, or even mentioning, the subject of technology imports into the United States. Yet, as the survey reponses for this study show, technology imports play a significant role in some U.S. companies. A recognition that technology transfer means imports as well as exports of technology for many U.S. companies is important to the development by both private and public sectors of sound policies governing the exchange of technology among countries and companies.

Aware of the limited information about technology imported into the United States, The Conference Board decided, in mid-1981, to follow up its earlier studies of technology and survey a number of U.S. manufacturing companies to ascertain their practices in importing and using foreign technology.[2] The survey and this report seek to answer two main questions for the respondent companies: What countries outside the United States are of major technical importance to U.S. companies? And,

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[1] The Conference Board received partial financial assistance for the survey from the National Technical Information Service of the U.S. Department of Commerce and this financial aid is much appreciated.

[2] Earlier studies include: James R. Basche, Jr. and Michael G. Duerr, *International Transfer of Technology: A Worldwide Survey of Chief Executives.* The Conference Board, Report No. 671, 1975; and Daniel Creamer with the assistance of Anthony D. Apostolides and Selina L. Wang, *Overseas Research and Development by United States Multinationals, 1966-1975: Estimates of Expenditures and A Statistical Profile.* The Conference Board, Report No. 685, 1976.

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in what industrial sectors or product lines are foreign technological developments of interest to U.S. companies?

Most interested observers of foreign technological developments and their import into the United States by U.S. business will not be surprised by either the country names or the industrial sectors that appear most frequently in the answers from the survey participants. Among the countries are Belgium, Canada, France, Germany, Italy, Japan, the Netherlands, Sweden, Switzerland and the United Kingdom; and among the industrial sectors are autos, electronics, chemicals, pharmaceuticals, machine tools, machinery of many kinds, plastics, metal products, and industrial and scientific instruments and controls.

These could be expected. This report, however, shows that the geographical areas from which technology is imported, or in which technological developments are monitored, go far beyond the countries that come to everyone's mind. And the broad range of industrial sectors in which even this limited group of U.S. company executives—limited in the sense that they represent but a small part of all U.S. manufacturing enterprises—believes it is necessary for the United States to keep informed about foreign technological developments is much wider than often considered.

Responses to The Conference Board survey were received through the Summer and Fall of 1981. The total number of usable responses came from 508 U.S. companies. For the purposes of this report, the responses were divided into two major subgroups by annual sales. Of the total responses, 369 (73 percent) came from companies with annual sales of $10 million or less; 100 (20 percent) came from companies with annual sales of more than $10 million. This second group ranged upward to companies with multibillion-dollar sales. The remaining 39 responses (8 percent) came from companies whose annual sales are not known. Many of these are private companies that are not required to make public reports of their sales. This last group may break down in approximately the same proportion as the larger group of respondents whose size is known, but chances are that the unknown group consists largely of companies with sales under $10 million. In the tables that follow, the group of unknown size is kept as a separate category.

(Note: In the survey report that follows, references to Germany and to Europe mean the Federal Republic of Germany and non-Socialist Europe, respectively, unless the text specifically indicates otherwise. References to "smaller" or "larger" companies mean those with sales of $10 million and under and those with sales of $10 million and over, respectively.)

Highlights of the Survey Results

— Almost one-third of the total participants in this survey think that in some areas of their companies' principal lines of production certain private foreign companies and industrial sectors have technology superior to their own.

— The percentage believing this is even higher (40 percent) among the larger companies—those with annual sales more than $10 million.

— Most respondents do not believe foreign technology in the hands of foreign state-controlled companies is superior to their own.

— Two-thirds of the participants believe that the United States is being outdistanced technologically by foreign companies in some industrial areas other than their own.

— More than three out of five survey participants report that their companies use some foreign-made machinery in their U.S. production.

— The reason most frequently given for using foreign-made machinery is its quality. Other reasons given by the users were price and "not available in the United States."

— Only one out of six participating companies reports it has licenses for foreign products or process technology in the United States. Licenses are a less frequently used method of acquiring foreign technology.

— Fewer respondents report the acquisition of foreign technology through R&D activities undertaken abroad than through the purchase of machinery or licenses abroad.

— More than three-quarters of the total respondents believe it is important (or very important) to monitor technological developments in their industries abroad. Even among the companies that indicated they do not think foreign technology in their industry is superior to their own, more than two-thirds believe it is important for their companies to monitor foreign technological developments in their industries.

— Many companies use both internal sources (e.g., foreign employees or representatives) and external sources (e.g., trade associations, consultants and publications) to monitor foreign technological developments in their industries.

Importance of Foreign Technology to U.S. Companies

Almost one-third of the total number of participants in this survey think that in their companies' principal lines of production certain private foreign companies and industrial sectors have technology in some areas that is superior to their own. Of 508 respondents, 164 (32 percent) expressed that view; 334 (66 percent) did not think foreign technology in such circumstances is superior to their own; and 10 companies (2 percent) did not reply. Among the larger companies (the 100 companies with more than $10 million in sales), even a larger percentage (40) believe that foreign technology is superior to their own in some areas.

The 164 companies that expressed the thought that foreign technology is superior to their own in some areas were asked to list which industrial sectors abroad and which companies outside the United States might have technology of that higher caliber. Of the 164 companies making this statement, 147 reported relevant industrial sectors, the countries where they believed such superior technology existed, and, in some cases, the names of specific companies whose technology in their own industrial sectors they considered could be superior.

List 1 shows the industrial sectors or product groups, by countries, as the survey participants reported them. Germany and Japan, as might have been expected, are the countries most frequently cited. In all, seventeen countries and regions were named, including five in Asia and twelve in Europe.

While many of the respondents named industrial sectors and countries outside the United States where they thought technology was superior, few of the U.S. firms named specific companies in which non-U.S. technology was believed to be superior. List 2 includes those companies cited that could be identified by country.

While U.S. companies may believe that some foreign private companies in their same lines of production may have superior technology, their answers differ sharply when they are asked about the technology available in foreign state-controlled companies. Almost nine out of ten respondents do not think that the technology used by foreign state-controlled companies is superior to their own technology. Only 30 companies (6 percent) felt that some state-controlled companies abroad did have technology superior to their own. A few of these respondents named some foreign state-controlled companies in this context. They included Renault in France; Bohler in Austria; the Petofi Cooperative Farm in Hungary; and Tampella, Valmet and Watsila in Finland.

In addition to being asked their views of foreign technology in their own industries, all participants were asked in what fields "other than your own" they believed foreign companies or industries are currently ahead of, or rapidly gaining on, their U.S. counterparts through technological development.

More than twice as many respondents (343 to 164) who thought there was superior technology abroad in their own fields listed industries other than their own in which they thought foreigners do now, or soon will, have a technological lead over the United States. Whether foreign companies in all these industries do in fact have a technological lead over the United States may be open to debate. But there is no doubt that the impression that the United States is being outdistanced technologically in many industries by many companies in many countries abroad is widespread among the survey respondents.

Some of the industrial fields most frequently mentioned in this category where foreign companies are technologically currently ahead of, or rapidly gaining on, U.S. companies in the same fields are aircraft and equipment, autos, computers, electronics, machine tools, robotics, steel making, and steel products. And, again as could be expected, the countries most frequently named are Japan, Germany and other west European nations.

The extent to which these perceptions of foreign technological superiority are held can be gauged in part by the numbers of recipients giving similar answers. For example, 105 respondents listed Japan as ahead of the United States technologically in the electronics industry. In addition, 43 others listed electronics as an industry where foreign countries lead the United States without naming any specific country. Still others cited Germany, Israel, Singapore, the Soviet Union, and the United Kingdom as being ahead of the United States technologically in one or more parts of the electronics industry. The perception of the U.S. lag in electronic technology is sharp, clear and widespread among the survey respondents.

In automobiles, 102 respondents named Japan as leading the United States, 35 named Germany as technologically ahead of the United States, 42 listed the field without naming a country, and others named France, Italy and Sweden. Fifty participants cited Japan as leading the United States technologically in steel making, 30 in computers, and 27 in robotics. In aircraft and related equipment, countries named for being ahead of the United States are France, Germany, Japan, Switzerland and the United Kingdom.

Besides these widely mentioned areas of U.S.

LIST 1

Countries and Industrial Sectors in which Foreign Companies Are Reported to Have Superior Technology

NOTE: Numbers following items indicate the number of times that item was cited; no number means the item was cited once.

Asia—Thin wood-veneer technology.

Australia—Die casters.

Austria—Industrial silk-screen printing machines.

Czechoslovakia—Art glass.

Europe—Blow molders; flexible packaging; food processing; machine tools; paper converting; paper machine clothing; pharmaceuticals; printing equipment and technology; steel foundries.

Finland—Art glass; electric wire and cable; paper-making machinery and equipment.

France—Acoustics; aircraft equipment; art glass; automated welding systems for auto-body assembly; bakery ingredients; primary metal processing and fabrication; rubber products; woodworking machinery.

Germany—Acrylic bead polymers; appliance controls; art glass; auto engines; bakery equipment; capacitors; ceramic tile technology; chemicals; chemical sealants; china manufacturing; computer software; electrical machinery and equipment; envelope manufacturing equipment; high speed packaging machines (2); industrial-mixers machinery; lighting fixtures; maritime tractor tugs; metal finishing and treating; newspaper-handling systems; non ferrous die casting; paper coating; paper-making machinery and equipment (2); paper-making technology (2); pharmaceuticals; plastic extrusion; plastic products including plastic pipe (2); power systems for computer rooms; printing equipment (2); products combining metal and plastics; robotics; rubber products; seamless tubulars; solar cell array welding; transportation equipment components; woodworking and laminating machinery (2).

Israel—Bakery machinery; pharmaceuticals.

Italy—Ceramic tile manufacturing; high speed packaging machinery; lighting fixtures; pneumatic fluid-power components; woodworking and laminating machinery (2).

Japan—Air-compressor technology (2); alloy steels; amateur receivers; auto production; auto supplies; batteries; capacitors; cast-metal industries; china manufacturing; communication-antennae technology; computer software; electrical machinery and equipment; electric components (2); electron microscopy; industrial coatings; integrated circuits and technology (3); laser-optic videodisc players; lens coating; lithography; machine tools; micro extruded plastic tips for writing instruments; optical equipment; overlay paper for wood; packaging machinery and equipment (2); paper making (2); paper products; pharmaceuticals (3); power tools; printing equipment (2); robotics; seamless tubulars; sensitized imaging paper; shipbuilding; steel foundries (2); steel production (2); thin wood-veneer technology; tv-deflection yoke; woodworking machinery.

Korea—Construction technology.

Netherlands—Bakery ingredients; flexible packaging; industrial silk-screen printing machines; manufacturing fabric and wallpaper; paper converting; plastic pipe; rotary-screen printing equipment.

Scandinavia—Coated carbide inserts; diamond wheels; immunochemicals; primary-metal processing and fabrication.

Sweden—Alloy steel; appliance controls; compressors; explosive accessories; flow and gas measurement techniques; mining technology; paper-making machinerv and equipment; power tools; textile machinery.

Switzerland—Conveyor and inserting machines; industrial controls; industrial silk-screen printing machines; paper making; paper products; pharmaceuticals; steam-process equipment; textile machinery; weaving and dyeing of stretch woolen fabrics.

United Kingdom—China manufacturing; explosive accessories; paper products; pharmaceuticals; precision metal refining; primary-metal processing and fabrication; shape controls for aluminum sheet and plate; textile products.

No Country Named—Advanced preservation systems for food products; aircraft components; aluminum building products; aseptic processing and packaging equipment; autos; automotive components for smaller vehicles; bridge building and equipment (2); ceramics; cocoa and chocolate production; consumer leather goods; couplings; direct-reduction processes; electronic components (2); electronic-measuring equipment; electrostatic-finishing equipment; energy conservation; evaporation equipment; fabricated metal products; fabrication of ship modules; fans and blowers (2); flexible packaging for food products; hand-tool design and development; handling and conveying of dried dairy products; heat treating; heavy-metal cutting and bending; high-speed machinery and equipment; hydro turbines; industrial chemicals; injection molding; iron ore pelletizing; machinery for fishing industry; machinery to make consumer leather goods; manufacturing transformers; marine diesels; mining equipment; nuclear equipment; packaging machinery and equipment; paint valves; paper-mill machinery (2); pesticides; pharmaceuticals; plastic molds; plastic shoes; pollution controls; printing equipment and technology; printing plastic containers; resin manufactures (2); robotics; screen printing; ship building; special metal-roll forming; specialty chemicals; synthetic fuels; textile fibers; textile machinery; thermoforming plastic; wire and cable products; wood furniture.

LIST 2

Foreign Companies Reported as Having Superior Technology, by Country

Brazil—Gema.

Denmark—Bergsoe.

Finland—Ahlstrom; Tampella; Valmet; Watsila.

France—Freysinet; Michelin; Pennarroya; Sciaky S.A.

Germany—AZO; Behring; Buettner; Daimler-Benz-Mercedes; Dykerhof; Erwin Kampf Machinen Fabrik; Gunter-Wagner; Honsel-Werke; Jaeger; Kalle; Mannesmann; Mauser Waldeck; Miehle; Otto Wild; Piller; Resopal; Rosenthal; Schenk; Schering GmbH; Schock Co.; Siemens; Staff; Tacke; T.B.S.; Telefunken; Voith Inc.; Volkswagen; Wavin GmbH; Windmoeller & Hoelscher; Winkler & Donnenbier; Zeiss.

Israel—Dead Sea Periclase Ltd.; IBAM.

Italy—Artimede; Dalmine; Flos; Grupo Finanziario Tessile.

Japan—Canon; Choyoda; Dai Nippon; Fuji; Hitachi; Hoya; IHI; Ijima; Jeol; Kenwood; Kyocera; Kyowa Chemical Industry Co., Inc.; Matsushita Electronics; Mitsubishi; Mitutoyo; Murata; NEC; Newlong; Nikon; Nippon Steel; Noritake; Seiko; Sharp; Showa Products Co.; Sony; Sumitomo; Taiyo-Yuden; TDK; Tomioka; Toppan Printing; Toshiba; Toyota; Universal Pioneer; Yaesu.

Korea—Hyundai.

Netherlands—Kats Neparofa.

Norway—EPA A/S; Nordic; Norsk-Hydro.

Sweden—Atlas Copco; Avesta; Kamyr Aktiebolag, Inc.; Nitro Nobel; Sandvik Inc.; Siemens Elema; Stora Kopperberg.

Switzerland—Bobst Manufacturing; Brown Boveri; Ferag A.G.; Staefa.

United Kingdom—British Ropes; Davy-Loewy Inc.; Dolton; Imperial Chemical Industries; Johnson Matthey Inc.; Lead Industries, Inc.; Royal Worcester; Simon Machinery.

technological lag, some of the more exotic citations of technological leadership abroad include applied microbiology in Denmark, the sewing of clothing in Hong Kong, solar energy in Israel, synthetic fuels in South Africa, and commercial fishing in the Soviet Union. A full listing of the countries and industrial sectors, other than the respondents' own industries, that are viewed by them as areas in which the United States is currently, or soon may be, lagging technologically is found in List 3.

LIST 3

Foreign Technological Leadership, by Country and Industry Sector in Field Other than Respondents' Own

NOTE: Numbers following items indicate number of times that item was cited; no number means the item was cited once.

Australia—Steel.

Brazil—Metal castings.

Canada—Injection molding machines; marker and pen assembly equipment; plywood manufacturing.

China—Metal castings.

Denmark—Applied microbiology; enzymes.

Europe—Aerospace and aircraft (3); dairy industry; life sciences; machine tools (2); metal-forming equipment; pharmaceutical-manufacturing equipment; plastics machinery; pollution-control equipment.

France—Aerospace and aircraft (3); automated warehousing; autos (5); nuclear energy (3); optics; plastic-fabrication processes; prefabricated houses; railroads and equipment (2); robots (2); rubber products; textiles.

Germany—Aircraft production (3); automotive sealings and coatings; autos (35); chemicals (5); chemistry; coal gasification; computers (2); concrete mixers and admixtures; cosmetics; electronics (5); electro deposition; extrusions; farm equipment; food-industry machinery; industrial instruments and controls; industrial machinery (9); injection-molding machines; machine tools (15); marker and pen assembly equipment; mechanical equipment; metal coatings; nuclear power; optical equipment (4); packaging; petrochemical coatings; pharmaceuticals (4); photographic equipment (4); plastic-fabrication processes; plastics machinery; plastic-mold design; production techniques; precision-manufacturing equipment (2); railroads; robots (3); ship building; shoe machinery; small diesel engines (2); steel making and products (12); television equipment; testing equipment; textile machinery (5); vacuum pumps.

Hong Kong—Optical products and equipment; sewing trade.

Israel—Electronic equipment for graphic-art industry; production scheduling; solar energy.

Italy—Autos; hardware; jewelry; leather goods; machine tools; plastic-fabrication processes; printing equipment; textile machinery (2).

Japan—Aircraft; air frames; appliances (3); audio equipment (4); automation (2); autos (102); baking equipment; ball and roller precision bearings (2); biochemical areas (2); business machines; calculators (3); chemicals; commercial fishing; computers and equipment (30); corporate management and interpersonal skills; cosmetics; electrical equipment; electronics (105); enzymes, farm equipment; foundries; industrial instruments and controls (2); industrial machinery (2); injection-molding machines; life sciences; machine tools (16); magnetic recording; marker and pen manufacturing; mass transport (3); materials-handling equipment; metal coatings; metal-fabrication equipment (2); metallurgy; numerical-control units (2); optics and optical equipment (13); pharmaceuticals (2); photographic equipment (19); plastics machinery (2); precision machinery; printing equipment; production techniques (2); productivity; railroad engines; railroad-passenger services (2); robotics and automated equipment (27); ship building; small engines (2); steel making and products (50); synthetic coated fabrics; synthetic fuels; telecommunications; television; radios and video recorders (13); textiles; textile machinery (3); watches (4); welding processes; word processors.

Korea—Metal castings; ship building; steel; textiles.

Netherlands—Applied microbiology; enzymes; printing equipment.

Poland—Plywood manufacturing.

Scandinavia—Dairy industry.

Singapore—Consumer electronics.

South Africa—Synthetic fuels.

Sweden—Autos and auto design (3); foundry equipment; productivity; robots and automated equipment (2); rolling mills for tool steel; steel alloys.

Switzerland—Aircraft; cosmetics; farm equipment; industrial instruments and controls; machine tools (3); newspaper handling systems; packaging; pharmaceuticals; printing equipment; railroads; robots; textile machinery (4).

Taiwan—Metal castings; plywood manufacturing; textiles.

USSR—Commercial fishing; diamonds; electronics; magnito-hydrodynamics; nuclear energy (2); pharmaceuticals; welding.

United Kingdom—Aircraft and aerospace (3); electronic equipment for graphic-arts industry; pharmaceuticals; primary metals; robots; textile machinery; turbine blades.

No Country Named—Aircraft (3); alternative-energy resources; aluminum-brazing alloys; amusement equipment; apparel; assembly-line production techniques; athletic equipment; atomic energy; audio equipment (2); autos (42); automated-machine tools (3); automotive farm machinery; chemicals (2); aviation and avionics; chemical synthesis; commercial fishing; communications; computers (7); electric-power equipment; electric mechanical equipment; electronics (43); electronically controlled pressure-relieving devices for chemical industry; energy utilization (2); flatware; food packaging; heavy equipment (2); hydraulic rock drills; industrial instruments and controls (2); injection molding; laser technology; long-wall mining equipment; lumber-manufacturing technology; machine tools (8); management skills; money management; office machines and equipment; optics (4); pharmaceuticals (3); photographic equipment (4); plastic packaging; plastic processing; plywood; printing; process-equipment technology; productivity; residential constructions; robotics (6); ship building (2); shoes (3); steel (15); tape-control machines; television and radios (7); textiles (2); textile machinery (2); transportation technology and equipment (3); turnkey construction; ultraviolet resin technology; weapons and weapon systems (2).

Country Named but No Industry Sector Listed—Canada; Germany (4); Japan (7); Portugal; Switzerland.

Acquisition of Foreign Technology by U.S. Companies

Technology can be exchanged among countries and companies in one or more ways. One of the most common instruments of technology exchange is the purchase and use of foreign made machinery. The extent to which foreign made machinery is used in the U.S. production of goods is one indication of the importance of foreign technology to the United States.

Use of Foreign-Made Machinery

More than three out of five (63 percent) of the 508 survey participants report that their companies use some foreign-made machinery in their U.S. production. Company size makes some difference; the larger companies more frequently report using foreign-made machinery. (See Table 1.)

It was noted earlier that 164 respondents thought that private companies abroad in their same product lines had technology superior to their own. Of these 164, 123 (75 percent) actually use some foreign machinery in their U.S. production. That is not surprising. What is surprising, however, is that more than half (57 percent) of the 334 respondents who reported that they do not think foreign technology superior to their own, are also using some foreign made machinery in their U.S. production.

There are, of course, many possible reasons for using foreign instead of U.S. machinery. Among those reasons are price, availability and delivery schedules. The reason most often given for using foreign machinery (cited by 56 percent of those who do so) is its quality. (See Table 2).

While many U.S. companies use foreign technology in the form of foreign machinery in their domestic U.S. production, many also use U.S. technology in their foreign operations. Only one-third (169) of the total respondents reported what technology they use in their foreign manufacturing operations. (Some of those that did not respond indicated explicitly that they left the question unanswered because they do not have foreign manufacturing operations. Others gave no reason for not replying.) A very large majority of those who did reply report that they use U.S. technology in their foreign operations, although not necessarily exclusively. (See Table 3.)

Licensing

A second common way of sharing technology across international borders is through licensing. A relatively small number of respondents (86, or 17 percent of the total) report that their companies have licenses in the United States for any foreign products or process technology. (The ratio of those that have acquired foreign technology by using foreign machinery to those that have acquired it through foreign licenses in the United States is approximately four to one.) Of the 86 companies, slightly more than half (45) are among the larger companies.

List 4 presents the product fields in which U.S. licenses are held by U.S. companies for foreign products or process technology. For a majority of U.S. companies (51 out of 86) that hold foreign licenses, the licenses are not limited to the U.S. market. The license may frequently permit the U.S. license holder to market its product in all of North America or, less often, in all of the western hemisphere or, still less often, in even wider geographic areas.

Licensing, like other means of exchanging technology across national boundaries, is a two-way process. Among the respondents, many more companies grant licenses for their own product and process technology to unrelated foreign firms than acquire such licenses from them. One hundred fifty companies (30 percent of the total) report that they license their own technology to unrelated companies in countries outside the United States. In contrast to the companies reporting the acquisition of licenses from abroad, a majority of the survey companies

Table 1: Use of Foreign-Made Machinery in U.S. Production, by Industry Size

Use Foreign Machinery	*Smaller Companies*	*Percent*	*Larger Companies*	*Percent*	*Size not known*	*Percent*
Yes	214	58	79	79	26	67
No	154	42	20	20	13	33
No reply	1	[a]	1	1	0	0
Total	369	100	100	100	39	100

[a] less than 1 percent

Table 2: Reasons for Using Foreign-Made Machinery in U.S. Production.

Reason	*Number*	*Percent of 319 Companies using*[1]
Quality	177	56
Price	155	49
Not available in United States	57	18
Delivery schedules	30	9
Special or superior technology abroad	15	5
More comprehensive designs	5	2
More appropriate designs	3	1
Foreign parent company provides	2	1
Acquired foreign equipment with acquisition of foreign firm	2	1
All Other	10	3

[1] Mutiple answers allowed.

Table 3: Source of Technology for Foreign Operations (169 companies)

Source	*Number*	*Percent*[1]
United States	145	86
Local country	38	23
Third country	9	5

[1] Multiple answers allowed.

that grant foreign licenses are from smaller companies. (See Table 4.)

Technology licensed to firms in other countries is sometimes changed by the licensee to adapt a product to a local market or to find ways of improving the product or the acquired process technology. Adaptations or other more significant changes by the licensee may, in turn, be provided to the original licensor by the licensee making the changes. In many license agreements, the licensee is *required* to supply the licensor with any such changes. Among the 150 U.S. companies reporting the licensing of their technology abroad, more than three-quarters stipulate in their license agreements that any changes or adaptations in the licensed technology made by the licensee should be supplied back to the licensor. (See Table 5.) A U.S. company licensing its technology can, in these circumstances, find itself an importer as well as an exporter of technology.

LIST 4

Product Fields in which U.S. Licenses Are Held for Foreign Products or Technology

NOTE: Numbers following items indicate the number of times that item was cited; no number means the item was cited once.

Acoustics; automobiles; automobile coatings; axial compressors; automatic tube-cleaning system.

Bearings; batteries (2); brake equipment for railway vehicles; beverage cases; bucket-wheel excavators.

Construction products (4); construction equipment; chemicals; consumer electronic products; curved tooth couplings; coal-gasification equipment; chemical process & technology for urea-fertilizer production; container-filling equipment.

Dispensing caps; dehumidification and energy-recovery equipment; diesel engines.

Electronic components (2); electrostatic painting & finishing equipment (2); electronic equipment; electromagnetic casting; expanders.

Fans and blowers (2); filters; forging hammers; fabric filters; food products.

Gearing designs; glass products.

Heat-transfer labels; heat exchangers (2); High-voltage utility products.

Ink products; industrial chemicals; industrial mixers; industrial instruments.

Mining equipment (2); military equipment; marine diesel engines; men's apparel; medical equipment; marine oil-water separators.

Optical video-disc equipment; optical lens; optical-thin films.

Paper-mill machinery; plastic products and processing (7); pharmaceuticals (4); paper coating; power-industry equipment; packaging equipment; petrochemicals; paper-machine clothing.

Rubber products; railroad-signaling devices.

Steel products (2); specialty chemicals; shipboard winches; steel process; sterile-manufacturing process; sponge-rubber extrusion.

Torquing tools; telecommunications equipment; tungsten-carbide wear parts; tobacco products.

Vertical-turning lathes.

Welding systems for automotive-body assembly.

Table 4: U.S. Companies Reporting the Licensing of Their Technology to Unrelated Foreign Firms, by Size

Size (by sales)	*Number*	*Percent*
Under $10 million	79	53
$10 million and over	62	41
Size unknown	9	6
Total	150	100

Table 5: Provisions in U.S. License Agreements Affecting Changes or Adaptations to Licensed Technology

Provision	*Number*	*Percent*
License agreements provide for foreign firms to supply licensors with any changes or adaptations made to licensed technology	117	78
No provision to supply licensor with any changes or adaptations	30	20
No response	3	2
Total	150	100

Research and Development

A number of U.S. companies have ongoing research and development activities in other countries. Technology improvements and new developments made in those countries and brought back to the United States for incorporation into U.S. production are another source of technology imports to the United States. The original source of the import is the U.S. company's own activities abroad, rather than a license acquired or machinery purchased from some unrelated foreign company.

Very few of the responding companies undertake research and development activities abroad. Of the 508 respondents only 78 do so, and, as might be expected, company size makes a difference. Of the 78 companies that do carry on research and development activities abroad, 59 percent are the larger companies, 31 percent are smaller companies, and 10 percent are companies whose size is not known from their replies. In each of these groups, however, more than half of the companies do not have any research and development activities abroad. Of the larger companies, only 46 percent do any R&D abroad. For the smaller companies, the figure is 7 percent, and for the companies of unknown size it is 21 percent.

The 78 companies that do have some R&D activities abroad were asked to name the countries and product fields in which they undertake such activities. All but one of these companies replied. Twenty-eight countries and regions, led in frequency by France, Germany, Japan and the United Kingdom were named. Pharmaceuticals and electronics led an extensive list of product fields. The complete list of countries and product fields is found in List 5.

LIST 5

R & D Activities Abroad, by Country and Industry or Product Line

NOTE: Numbers following items indicate the number of times item was cited; no number means the item was cited once.

Australia—Consumer cleaning products; electronics; home appliances; power-distribution systems; tobacco products.

Asia—Heat-pipe technology.

Belgium—Electrochemicals; electronic components (2); industrial chemicals; industrial lubricants; magnetic heads; petrochemicals; petroleum exploration and production; specialty chemicals; transportation fuels and lubricants; wire and cable products.

Benelux—Tread rubber and related products.

Brazil—Appliance controls; automatic-switching equipment; electronic components; environmental products; mining equipment; specialty chemicals; valves; wire and cable products.

Canada—Automatic-switching equipment; automotive parts; consumer food products including mixes, glass goods, and meats; machine tools; medical equipment (2); paper products; pharmaceuticals (2); polymers; pumps and oil-field machinery.

Chile—Fabricated steel products.

Europe—Elastomer and polymer products; electronics; heat-pipe technology; medical equipment; plastics packaging.

France—Acoustical products; aerosol valves and pumps; aircraft equipment; appliance controls; chemicals (unspecified); consumer cleaning products; diesel-engine components; electrochemicals; electronic components (2); electrostatic equipment for coating industry; environmental products; glass and ceramic technology; home appliances; industrial chemicals; mining equipment; pharmaceuticals (4); power-distribution systems; reinforced-earth technology; specialty chemicals; transportation equipment; valves; wire and cable products.

Germany—Acoustical products; computers; diesel-engine components; electron optics; electronic and electrical components; electrostatic-painting equipment; fabricated steel products; health-care products; high-temperature textiles; hydraulic valves and actuators; industrial instruments and controls (3); industrial lubricants; microwave devices, antennae and systems; petrochemicals; petroleum exploration and production; photo systems; plasma physics; power-distribution systems; process-control instrumentation; transportation equipment (2); transportation fuels and lubricants; tread rubber and related products; ultrasonics.

Greenland—Electronics.

Hong Kong—Electrical personal-care products; health-care products; printing equipment and technology.

India—Health-care products.

Ireland—Power-distribution systems; painting equipment and technology.

Israel—Medical equipment.

Italy—Chemicals (unspecified); electrochemicals; industrial chemicals; microwave devices, antennae and systems; pharmaceuticals; rubber products; specialty chemicals; transportation equipment.

Japan—Appliance controls; chemical oil and fuel additives; electrical personal-care products; electrochemicals; electronic components and materials (2); electrostatic painting equipment; fasteners and applicators; food-product packaging equipment; health-care products; industrial chemicals; paper products; pharmaceuticals (2); specialty chemicals.

Latin America—Automotive equipment; building and construction materials and technology.

Mexico—Automatic-switching equipment; fertilizer chemicals; stainless-steel alloys.

Netherlands—Automatic-switching equipment; communications systems for cable and subscription TV; electronic grinding-machine feeding devices; glass reinforced concrete; hydraulic components; livestock poultry nutrition; materials-handling equipment and systems; shear knives; static eliminations.

New Zealand—Specialty chemicals.

Singapore—Optics and optical instruments.

South America—Power-distribution systems.

Spain—Electric components; health-care products; poultry nutrition; reinforced-earth technology; ultrasonics; wire and cable products.

Sweden—Air filtration; dehumidification; environmental products; magnetic separators; mining equipment; paper machine clothing; tread rubber and related products; valves.

Switzerland—Air filtration; chemicals (unspecified); electrochemicals; electronic materials and components; electrostatic equipment for the coating industry; industrial chemicals; magnetic separators; pharmaceuticals; specialty chemicals; tobacco products.

Taiwan—Electrical personal-care products; health-care products.

United Kingdom—Acoustics; aerodynamics; automatic-switching equipment; chemical oil and fuel additives; computers; consumer cleaning products; dehumidification; diesel-engine components; electrodeposition; electrochemicals; electron optics; electronic and electrical components (2); environmental products; fabricated steel products; glass-reinforced concrete; health-care products; home appliances; hydraulic components (2); industrial chemicals; industrial instruments and controls; industrial lubricants; kitchen utensils; machine tools; materials-handling equipment and systems; metal finishing; microwave devices; antennae and systems; mining equipment; paper products; petrochemicals; petroleum exploration and production; pharmaceuticals (2); poultry nutrition; razors and blades; rubber and plastic extrusion; specialty chemicals; transportation equipment; transportation fuels and lubricants; ultrasonics; valves.

No Country Named—Automotive equipment.

Monitoring Foreign Technological Developments

With three out of five companies reporting the current use of foreign-made machinery in their U.S. production and with almost one-third of the respondents indicating they think foreign private companies have technology in some areas superior to their own, it can be expected that most respondents believe it useful—or even necessary—to monitor foreign technological developments in their industries on some regular basis. And such is the case.

More than three-quarters of the total respondents (390) believe it is "very important" or "of some importance" for their companies to monitor technological developments in their industries abroad. It is not surprising to find most of the companies in the group of almost one-third of the total that thinks foreign technology in some areas of their industry is superior to their own also in these 390. What is surprising, however, is that even among the 334 companies that indicated they do not think foreign technology in their industry is superior to their own, more than two-thirds still believe it is important for their companies to monitor foreign technological developments in their industries. This expressed need to monitor foreign technological developments, even when such current developments are not considered up to U.S. standards, implies an awareness on the part of a large portion of the survey respondents that new technology is regularly being developed abroad and may at some time have a significant impact on their industries.

Countries and Industrial Sectors to be Monitored

Survey participants were asked to name the countries, if any, in which they believe technological developments should be monitored for their companies. Answers were received from 349 (69 percent) of the respondents. Thirty-six countries and regions were named, led by Canada, Europe, France, Germany, Japan, Sweden, Switzerland and the United Kingdom. The list included others, less frequently named, and probably not usually considered by U.S. business executives as technologically advanced—for example, China, Hungary, Indonesia, Mexico and Romania.

Among the industry fields most often cited in this connection are chemicals, mining and metal industries, machinery and machine tools, electronics, food products and processing, industrial instruments and controls, packaging, printing, textiles and textile machinery, plastics and shipbuilding. A full list of the countries and industrial fields suggested for necessary monitoring by survey participants is found in List 6.

Who Monitors?

On the assumption that many responding companies would use the same personnel to monitor foreign technological developments that they use in their domestic research and development activities, the survey sought some general information in this area. More than half the total respondents (58 percent) reported that their companies have assigned principal responsibility for technical research and development to an individual or special staff. Although there is some variation by company size (70 percent for larger companies and 53 percent for the smaller), more than half the companies in each size category follow this procedure.

In order to ascertain the level to which the 292 respondents assigned R&D responsibility, they were asked to state the title of the officer. The specific titles varied widely, but the level most frequently cited is that of vice president, as the tabulation below shows.

The functional areas in which these officers hold responsibility are mainly engineering and research and development. For example, 33 held the title of vice president for R&D and 13 were directors of R&D; 29 were vice presidents, engineering; 13 were directors of engineering, and 11 were chief engineers. In many smaller companies, however, responsibility for R&D is part of the general management function, and for 33 respondents the principal R&D officer is the company president. Other company areas from which the principal R&D officer is selected, according to respondents, are manufacturing, productivity, product development, marketing, quality control, and systems research.

Title or Level	*Number*
Vice President	127
Directors and Managers	77
President	33
Engineers	17
Senior Vice President	10
Scientists	7
Executive Vice President	6
Other	5
Subsidiary Staff	3
Vice Chairman	3
Chairman	2
Divisional Staff	1
No Reply	1
	292

The assumption that monitoring foreign technical developments is largely done by the same personnel responsible for domestic R&D is largely borne out. Of the 508 respondents, 242 reported that they assigned responsibility for monitoring foreign technical developments to the same officer who has overall R&D responsibility. This number is slightly under half of all respondents but is 83 percent of those companies (292) that said they had an officer specifically assigned principal responsibility for R&D activities.

Many respondents indicated the same officer in their companies is *not* responsible for monitoring foreign technical developments and managing domestic R&D activities. For a large number of these the reason is simply the fact that no one has been specifically designated to be the R&D officer at home or abroad. Seventy-nine companies report that they assign the responsibility for monitoring technical developments abroad to someone other than the person given R&D responsibilities or assigned to monitoring domestic technical developments. Taking together the number assigning R&D personnel (242) and the number assigning others (79), a total of 321 companies (63 percent) have someone assigned to monitor foreign technical developments at least on a part-time basis and regularly, even if not continuously. The tabulation below shows the persons, other than principal R&D officers, who are assigned the duty of monitoring foreign technical developments. As this assignment may be shared, the 79 companies reported 87 titles.

Title	*Number*
President	19
Vice President	17
Directors and Managers	13
Engineers	11
Committees	6
General Manager	5
Group or divisional staff	4
Sales staff	4
Foreign operating unit presidents	3
International staff	3
Chairman	1
Executive Vice President	1
Total	87

(text continued on page 15)

LIST 6

Suggested Countries and Industry Sectors Where Monitoring Foreign Technological Developments Should Be Undertaken

NOTE: Numbers indicate number of citations for preceding item. No number means item was cited once.

Asia—Industrial instruments and controls; textile machinery.

Australia—Beverage products; forest products; metal products (2); mining equipment; nonelectrical machinery; photographic equipment.

Austria—Alloy steels.

Belgium—Metal products; mining equipment; nonelectrical machinery; packaging technology.

Brazil—Alternate fuel-propulsion systems; shoe manufacturing; transportation equipment.

Canada—Automatic-switching equipment; business machines; chemicals; electronics; explosive accessories; food processing, packaging and preservation; industrial chemicals; metal products; nonelectrical machinery (2); paper-making machinery and equipment; plastic-extrusion technology; specialty chemicals.

China—Shoe manufacturing.

Commonwealth—Industrial instruments and controls.

Denmark—Chemicals; food products; industrial instruments and controls; packaging technology; printing and graphics; textiles.

East-Bloc Countries—Industrial chemicals; metal products; nonelectrical machinery; specialty chemicals; stone, clay, glass, and concrete products.

Europe—Aircraft and aerospace; auto technology; batteries; building products and construction technology (2); business machines; chemicals; electrical machinery and equipment (2); food products, processing and preservation (2); forest products; health-care products; industrial chemicals; industrial instruments and controls (2); industrial tools and equipment, metal products, medical equipment (2); mining and metal industries (5); nonelectrical machinery (5); packaging technology; pharmaceuticals; product systems; resin manufacturing; rubber and plastic extrusion; rubber products; screen printing; specialty chemicals; stone, clay, glass and concrete products; textiles (4).

Finland—Electric wire and cable; forest products; paper-mill machinery and equipment (2); pollution controls.

France—Aircraft equipment; alternate fuel-propulsion systems; autos and components; beverage products; chemicals (2); communications equipment; construction technology; electrical machinery and equipment (4); electronic components and equipment (5); explosive accessories; food-packaging equipment; food products and processing (3); forest products; furniture; industrial instruments and controls (4); machine tools; medical equipment and systems; metal products and processing (7); mining equipment; nonelectrical machinery (9); oil exploration and production; optics and optical equipment (2); paper making; petrochemicals (2); petroleum products and technology (2); pharmaceuticals (2); photographic equipment; steel products; transportation equipment (3).

Germany—Aircraft equipment; apparel (2); appliance controls; autos and auto components (3); automatic-switching equipment; bakery equipment; beverage products (2); biotechnology; bridge-building equipment; ceramic tiles; chemicals (9); chemical sealants; chocolate production; CNE application to girders; combined metal and plastic products; construction technology; consumer-health goods electrical equipment and machinery (14); electronic equipment and components (7); envelope-manufacturing equipment; environmental systems; food-products industry (8); forest products (4); foundries; furniture manufacturing (2); gear manufacturing; grinding technology and equipment; home appliances; industrial instruments and controls (11); industrial mixers; lighting fixtures; lithography, machine tools (3); medical equipment and systems; metal products and processing (20); mining equipment (2); molding techniques; nonelectrical machinery (35); oil exploration and production; optics and optical equipment (3); packaging technology (3); paper-coating products; paper making and products (7); petrochemicals (2); pharmaceuticals (4); plastic products (8); plastic technology (4); power systems; printing and publishing (10); pumps; resin technology; robotics; rubber products (4); shipbuilding; steel products (3); stone, clay, glass and concrete products (2); synthetic fuels; textiles (6); textile machinery (4); transportation equipment (3); valves; woodworking machinery (2).

Hong Kong—Electrical machinery and equipment; metal products; plastic products.

Hungary—Nonelectrical machinery.

Indonesia—Forest products.

Israel—Chemicals; electrical machinery and equipment (2); industrial chemicals; nonelectrical machinery and equipment; printing technology (2); specialty chemicals.

Italy—Apparel; auto industry; beverage products; ceramic tile; chemicals (4); combined metal and plastic products; consumer leather goods; electric wire and cable; electrical machinery and equipment (3); electronics; food processing and equipment; forest products; furniture; glaze technology; lighting fixtures; machine tools; metal products (2); mining equipment; nonelectrical

(list continues)

machinery (4); packaging equipment; paper making; pharmaceuticals; photographic equipment; plastic products and technology (2); printing; rubber products; shoe manufacturing; steel products; stone, clay, glass and concrete products; textiles; transportation equipment; woodworking machinery (3).

Japan—Aircraft equipment; apparel; appliance controls; auto industry (5); automated vacuum brazing; automatic-switching equipment; automation; bakery equipment; batteries; biotechnology; business machines; ceramics (2); chemicals (5); chemicals sealants; china manufacturing; combined metal and plastic products; communications equipment; construction technology; consumer leather goods; electical equipment and machinery (19); electrical personal-care products; electronic equipment and components (14); food products and processing (4); forest products; foundries; gear manufacturing; grinding technology and equipment; health-care products; home appliances; industrial chemicals; industrial coatings; industrial instruments and controls (11); iron and steel products (4); lithography; machine tools (3); medical equipment; metal products and processing (21); mining technology and equipment (3); molding techniques; nonelectrical machinery and equipment (37); optical technology (3); optical thin films; packaging technology and equipment (4); paper coatings; paper-mill machinery and products (4); petrochemicals; petroleum refining; pharmaceuticals (5); plastic products (8); plastic technology (2); printing and publishing (8); pumps; robotics; rubber products and technology (6); satellite broadcasting (2); shipbuilding; specialty chemicals; stone, clay, glass and concrete products (3); synthetic fuels; textiles (4); textile machinery; transducers; transportation equipment (3); valves.

Korea—Food products; forest products; metals industry; plastics; shipbuilding.

Mexico—Textiles.

Netherlands—Automatic-switching equipment; chemicals (3); electronics (2); environmental systems; extrusion technology; food products (3); glass-reinforced concrete; industrial instruments and controls; packaging technology; printing equipment.

Norway—Housing construction; industrial instruments and controls; metals processing; shipbuilding.

Poland—Metal products; mining equipment; nonelectrical machinery; transportation equipment.

Romania—Metal products; mining equipment; nonelectrical machinery; transportation equipment.

Scandinavia—Acoustics; food freezing; forest products; metal products and processing; paper products; pharmaceuticals; plastic extrusion and products (2).

Singapore—Electrical machinery and equipment; shipbuilding.

South Africa—Beverage products; chemicals; explosive accessories; iron and steel products; metal products; mining equipment; nonelectrical machinery.

Spain—Ceramic tile; chemicals; metal products; mining equipment; nonelectrical machinery (2).

Sweden—Appliance controls; bridge-building equipment; electrical machinery and equipment; explosive accessories; food products and processing (2); forest products; furniture; grinding technology and equipment; housing construction; industrial instruments and controls; iron and steel products; machine tools; medical equipment and systems; metal products (2); mining equipment; nonelectrical machinery (6); packaging equipment; paper-making machinery and equipment; shipbuildng; textile machinery.

Switzerland—Chemicals (2); chocolate production; CNE applications to girders; electrical machinery and equipment; electronics; food products and processing; forest products; inserting and mailing equipment; metal products (3); mining equipment; nonelectrical machinery (3); plastic; printing and publishing (2); textiles and textile machinery (5); transportation equipment.

Taiwan—Forest products; metal products; plastics (2); shoe manufacturing.

Third-World Countries—Wood products.

USSR—Iron and steel products; metal products; mining equipment; nonelectrical machinery (2); oil exploration and production; transportation equipment.

United Kingdom—Autos; chemicals (4); china manufacturing; chocclate production; communications equipment; electrical machinery and equipment (6); electric wire and cable; electronics (6); explosive accessories; forest products; foundries; furniture; industrial instruments and controls (6); iron and steel products (2); machine tools; metal products (7); mining equipment; nonelectrical machinery (9); oil exploration and production; optical equipment; paper industry; petrochemicals (2); petroleum products and technology; pharmaceuticals (3); photographic equipment; plastics; printing (3); pumps; rubber products; shipbuilding; stone, clay, glass and concrete products (2); textiles (3); tobacco products; transportation equipment; valves.

No Country Listed—Acoustical technology for musical instruments; agricultural grain handling and drying equipment; construction techniques; diesel engines; dyestuff; electrical machinery and equipment; electronics (2); fabric-impregnating technology; implantable materials; machinery and equipment for fishing industry; medical instruments and equipment; metal-fabrication techniques; mold making for plastic industry; nuclear technology; overlay-paper production; paper products; precious-metal refining; printing technology; resin chemistry; resin-transfer molding; silk-screen engraving; space technology; transportation equipment; wood-grain reproduction.

Country Named but No Industry Sector Listed—Australia; Canada; Europe (3); Far East; France (10); Germany (18); Italy (6); Japan (16); Sweden (2); Switzerland (4); United Kingdom (6).

(text continued from page 12)

Sources of Information for Monitoring Foreign Technology

The person assigned the responsibility for monitoring foreign technological developments has a variety of information sources to draw upon. Some of these are internal company sources. They include the foreign subsidiaries and other foreign-related units that are charged with the responsibility for collecting all relevant technical data to meet the company's needs within their particular geographic area of responsibility. These foreign units often include foreign licensees as well as those units in which the U.S. company has direct equity. Several respondents also report that they rely on their sales representatives abroad, whether company employees or company agents, to gather during their business travels technical data that might be of interest to the home company.

Company representatives are often expected to make regular visits to foreign trade shows, and sometimes to foreign competitors, to view the latest technical developments. In a few cases, respondents pointed out that they have either formal or informal, but regular, exchanges of technical information with foreign companies in their industry or with the representatives of such foreign firms in the United States.

For many of the respondents the reliance on these internal company resources and direct relationships to collect data about foreign technological developments is their main, and in a few instances, their only source of such information. For many others, however, persons assigned company responsibility for monitoring foreign technological developments turn to a number of outside sources as well.

The most frequently reported outside source of information, as might be expected, is publications. These include trade and industry journals, business directories, technical journals, patent reports, and general scientific journals. These are often supplemented by reports of information collected by trade and industry associations on which many companies, especially smaller companies, rely for gathering information about foreign developments in their industries.

Allied with the review of patent publications mentioned by several companies, one company reported that it relies on "our patent attorneys" to collect from foreign sources technical information useful to the company. Several respondents from companies that use foreign-made machinery reported reliance on these foreign-equipment suppliers to keep them abreast of technical developments in their respective countries or regions.

Other sources of technical information from abroad mentioned by respondents are market research organizations and computerized data bases. Of the latter, those of Lockheed, Control Data, and Dataquest were specifically cited as sources of information for foreign technical developments.

Finally, a number of respondents named U.S. Government departments and agencies as information sources that they regularly monitored for technological developments abroad. Of the total respondents approximately one in eight reported that the company receives foreign technical information on a regular basis from a U.S. government agency or department. Most frequently mentioned as a source for such information is the U.S. Department of Commerce, followed by the National Technical Information Service (which is a unit of the Department of Commerce), and NASA. A full list of the government agencies and departments regularly used is found in List 7.

A few of the respondents indicated they were opposed to using government sources for information about foreign technical developments. Some of these felt that government reports were too generalized, too late for the company's use, or not available in a form for easy use by the company. Others objected on more general philosophical grounds that they did not wish to rely on government sources for any of their business needs; instead they preferred their own sources or other private-sector sources. For a large portion, more than three-quarters of the more than 400 companies that do not use government information sources for foreign technical information, the main reason is that they are simply not aware that such information services are available.

LIST 7
U.S. Government Departments and Agencies from which Companies Receive Technological Information (63 responding companies)

Department of Commerce	23
National Technical Information Service	8
National Aeronautics and Space Administration	7
Department of Energy	6
Department of Defense	4
Patent Office	3
Department of the Navy	1
U.S. Navy Office of Research-London	1
Naval Research Laboratories	1
Office of Naval Intelligence	1
Department of Agriculture	1
U.S. Forestry Service	1
U.S. Customs Service	1
General Services Administation	1
Department of State	1
Tennessee Valley Authority	1
National Research Council	1
U.S. Bureau of Mines	1
Government Printing Office-Monthly Catalog	1
None listed	15

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The New Corporate Programs

by Nathan Weber

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Introduction

Commuting to and from the workplace has traditionally been the responsibility of the individual employee. By private automobile or by some type of public transit, millions of workers in U.S. corporations have, for the better part of this century, found their own ways to get to their jobs and back home. Their employers were primarily concerned that they arrived on time, not how they chose to go. So long as public transit operated efficiently enough, and prices for automobiles, fuel and loans were generally affordable, corporate management saw no need to involve itself with commuter transportation.

Today, both mass transit and the private automobile are experiencing severe—some would say overwhelming—difficulties. The multiple effects of this dual crisis on the economy in general, and on individual businesses, have motivated an increasing number of firms to experiment with alternative programs of commuter transport in both urban and suburban areas. Sometimes referred to as paratransit, the new programs address not only immediate commuter needs, but also such widely disparate areas as energy conservation, worker productivity, traffic management, zoning and parking ordinances, pollution and tax reform. At least one new service industry—third-party vanpool operations—has been developed as a result, and some employee participants have found new ways to increase their weekly earnings by retaining a percentage of the fares. While a few companies had been involved in commuter transit for decades, almost all of the new programs have fairly recent origins: The earliest were begun in the mid-1970's and continue through the present. (See Chart 1, p. 4.)

What Are the New Programs?

Vanpooling—a program under which eight to fifteen passengers who live within close proximity of each other ride to and from work in a van along a route established by themselves—may be the most well-known. Research undertaken by the National Association of Van Pool Operators, Inc., the primary trade association in the field, indicates that from 1976 to 1981 the number of vanpools operated by corporations, government agencies, service companies, and small businesses has grown about tenfold—from 2,000 to between 18,000 and 20,000. Some 200,000 people commute via vanpools, saving an estimated 115 million gallons of gasoline a year.[1]

Other paratransit programs include carpools, corporate subsidization of employee transit fares, the use of charter or subscription buses, and management assistance to public transportation authorities. Some companies are heavily involved in these projects; others participate only so far as providing special parking privileges, or encouraging their employees to patronize the mass-transit system.

Among the most significant aspects of the new programs is that, for the most part, they have not provoked negative responses from traditional transportation providers—for example, the public systems, private transit operators, or automobile dealers. Indeed, a considerable amount of cooperation has been in evidence. One-third of the 235 corporate programs surveyed in this report intersect with mass-transit systems, both governmentally and privately operated. In addition, a considerable amount of corporate managerial assistance is offered to public transit authorities—over one-fourth of the surveyed companies provide such aid. Likewise, government agencies provide training manuals and workshops on establishing corporate programs. At least one major automobile company has established a leasing arrangement for carpool and vanpool programs, and two auto producers provide ridesharing programs for their own employees.

Public-private partnerships have been forming on the administrative level as well. Transportation management associations—nonprofit organizations consisting of local businesses, community leaders, land developers, and sometimes government agencies—are emerging to deal with transportation problems too complex for any one public or private group acting alone.[2] To the extent that the problems in traditional public transit and in the private automobile industry deepen, such cooperation will likely continue into the foreseeable future.

About This Report

A survey of 235 corporations presently operating employee-transportation programs forms the basis of this report. Developed with the cooperation of business and governmental transportation and ridesharing experts, a questionnaire was sent to more than 2,100 corporations.

In addition to the 235 companies that have programs, another 290 firms that are not presently involved in transportation responded to the questionnaire. Most of them indicated interest but stated that they have no immediate plans to establish commuter arrangements for their employees. The total response rate to the questionnaire was, therefore, 25 percent of the polled population.

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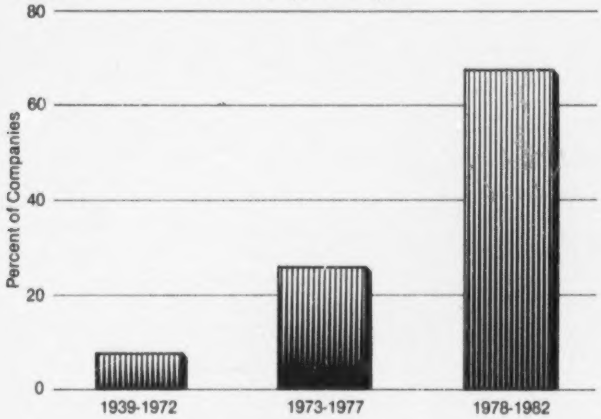
[1] National Association of Van Pool Operators: Data presented at Sixth Annual Conference, April 27-29, 1982, Gatlinburg, Tennessee.

[2] C. Kenneth Orski, "Urban Transportation," in Jack A. Meyer (ed.), *Meeting Human Needs: Toward a New Public Philosophy*. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1982, pp 258-271.

Chart 1: Years Program Began



Administrators of the new corporate programs tend to be enthusiastic about the benefits they provide: Almost 60 percent of them, according to the Board's survey, actively encourage other employers to establish commuter-transportation operations. Nearly half urge their own employees to use the mass-transit system, regardless of whether the firm has its own ridesharing methods. About 18 percent participate in cooperative programs, either with other companies or with local government.

The Mass-Transit Crisis

Public transportation is an enterprise serving far more than its primary function of carrying people to and from their desired destinations. It is a vital tool for urban development and revitalization, energy conservation, and environmental protection. It can save space in congested areas and help agglomerate economic activities in dispersed areas.

When mass transit was exclusively a private enterprise, it was seen as a way to raise land values; under government operation, it is used to promote downtown retail sales and jobs, and is itself a major employer. While helping to subsidize a variety of private interests—companies, employees, developers, shopping centers—public transit is also a voracious consumer of public subsidies. In spite of steadily rising fares, government disbursements accounted for 51 percent of all transit operating revenues in fiscal 1980 (16.6 percent federal, 12.2 percent state, and 22.1 percent local), or close to $3 billion. This does not include capital grants, which amounted to another $1.26 billion in 1980.[3] (The American Public Transit Association estimates that government capital grants actually totaled $2.8 billion in 1980.[4] The difference may be due to the fact that the federal statistics were derived from data submitted by a representative sample of public-transit systems—rather than from all systems.)

Perhaps because of its central importance to the economy, public transit—which consists of some 1,055 separate systems—has, for the past decade, been reeling under the same crisis afflicting cities in general. Mechanical breakdowns on new as well as older vehicles, increasing fares for deteriorating service, deficits that grow at nearly 20 percent a year,[5] strikes inconveniencing tens of thousands of passengers (and thereby exacerbating a trend of ridership decline), a pervasive sense of frustration and resignation among passengers who have no other mode of commuting—these are the parameters of the crisis, affecting systems in major, as well as smaller, cities.

While it can be argued that the crisis would be far more severe had it not been for the grants, research and other programs authorized by the Urban Mass Transportation Act,[6] this national commitment to public transit has been only partially successful—a not surprising result, observers say, in light of the structural causes of the crisis. Three factors are generally cited as contributing to the prevailing difficulties: the immense popularity of the automobile, which has drained off ridership; the federal highway and low-cost home mortgage policies designed to promote suburbanization following World War II; and the deepening fiscal problems of cities, which have led to disinvestment in transit maintenance.[7]

The above factors are closely interrelated. Mass production of the automobile opened the opportunity to develop residential communities (suburbs) considerably outside the central cities. Improved roads were promoted to accommodate the individually mobile travelers, as well as to encourage further car purchases. Hence, the formation of a powerful highway lobby and the creation of the multibillion dollar highway trust fund financed by federal excise taxes, primarily on fuel.

As the desirability and availability of suburban living helped push up the price of housing, returning veterans and others needed assistance in becoming homeowners. One response was federal subsidy of mortgage loans through the VA and FHA programs. With the building of suburbs and highways, middle income residents began

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[3] U.S. Department of Transportation, *National Urban Mass Transportation Statistics: Second Annual Report*. Washington, D.C., June 1982, Table 1-14.

[4] American Public Transportation Association, *Transit Fact Book 1981*. Washington, D.C.: p. 29.

[5] Ronald F. Kirby, "Current Issues in Financing Public Transportation," speech before the Conference on Future Directions of Urban Public Transportation at Woods Hole, Massachusetts, September, 1982.

[6] For an evaluation of UMTA, see George W. Hilton, *Federal Transit Subsidies: The Urban Mass Transportation Assistance Program*. Washington, D.C.: American Enterprise Institute for Public Policy Research, 1974.

[7] Louis J. Gambaccini, New Jersey Commissioner of Transportation, *The Financial and Productivity Problems of Urban Public Transportation*. Hearings before Committee on Public Works and Transportation, 97th Congress, June and October, 1981, p. 7, ff.

Private-Sector Public Transport

"In the time before the private automobile, only a very few urban dwellers could afford personal transportation, and the good public transportation provided by street railways was an imperative to life in the cities.... Illustrative of the importance of street railways, for example, is urban ridership in 1917, when the average city dweller took 260 trolley rides a year.

"At its peak around the time of World War I, the urban street railway industry was a great and powerful one. In 1917, for example, there were over 1,000 street railway companies with an aggregate investment of over 4 billion dollars. These companies operated 60,000 streetcars over 26,000 miles of track. They carried nearly 11 billion passengers a year and generated annual revenues of some 600 million dollars."[1]

[1] William D. Middleton, "History of the Private Sector Role in Public Transit," unpublished speech before Transportation Research Board Conference, University of Virginia, August 8-11, 1982.

their much described exodus from the cities, taking with them their transit fares and tax dollars, and leaving behind municipal governments strapped for operating revenues.

Other factors have added to the crisis in public transit. Managers of transit systems have been called self-serving and profligate, "mediocre, often amateurish, and unstable."[8] To the extent that they operate a near-monopoly, they have been accused of taking their ridership for granted, thereby ignoring the need to aggressively market their service.[9] To deal with the relentless escalation of costs, they have been charged with operating on an assumption of limitless government subsidies. As one analyst commented, managers found it " 'unthinkable' for governments to let such [transit] service contract significantly, let alone disappear."[10]

The tactics of organized labor, which have pushed labor costs up to about 75 percent of transit operating costs,[11] are also frequently mentioned as a major contributor to the crisis. Among the highest paid public-sector service employees, transit union members maintain a monopoly situation given the near absence of competition. "Having begun as private employees, transit workers were organized and enjoyed the right to strike in most locales before they went public," one observer noted. "As the price for giving up the legal right to strike on entering the public sector, they typically obtained the right to binding arbitration on disputes."[12] With this authority, they went on to base their wage demands not in comparison to wages of other public-sector employees, but to the already higher wages of transit workers in other locales. This negotiating pattern, backed by a credible threat to strike, resulted in management concessions to wage increases that reportedly outpace inflation.

Thus, while the Consumer Price Index rose 14 percent between 1967 and 1980, transit wages went up 160 percent in that period.[13] A transit union's capacity to extract higher wages from a locality has been further enhanced by its veto power over the locality's acquisition of federal funds, according to critics.

Depreciation and investment tax credits, which encourage the purchase of new manufacturing plants rather than reinvestment in existing plants, may have also contributed to the relocation of industry outside the city and to declining ridership.[14] Federal design requirements for transit equipment, initially intended as a cost-saving technique by encouraging economies of scale, may have inadvertently forced up prices by making it difficult for smaller localities to obtain the necessary equipment, according to Ronald Kirby, a transportation expert at The Urban Institute.

Finally, technological development itself has been impeded by the enormous investment in existing facilties, and by the prohibitive cost—in congested urban areas—of securing new rights of way required by technological innovations.[15] "The fact is that the future of the American city is uncertain and changing, and the city is a risky setting for expensive and irreversible transport investment."[16]

The price tag for repair, modernization and new construction of public transit has been placed at $50 million (in constant 1980 dollars). This estimate does not include costs required by railroads for rolling stock (vehicles) and fixed plant—another $55.23 million.[17]

The Automobile Crisis

Largely responsible for the declines in ridership of mass transit, the private automobile today finds itself suffering from problems as serious as those afflicting its public-sector counterpart. Plant closings, massive layoffs, rebate wars among the major manufacturers, and demands for protective legislation against foreign imports continue to dominate the headlines. And just as direct government subsidies have not stopped the crisis in public transit, so the indirect societal subsidies of the automobile—the cost of air pollution, accidents to health, life, lost time, property damage, and litigations which "has never been fully incorporated into the cost of driving"[18]—have not effectively shielded this mode of travel.

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[8] *Time*, March 30, 1981, p. 13; also Alan Altschuler, *Hearings*, June and October, 1981, p. 36.

[9] Ronald F. Kirby, Urban Institute, in discussion with author.

[10] Altschuler, *Hearings*, June and October, 1981, p. 35.

[11] *National Urban Mass Transportation Statistics*, Table 1-30.

[12] Altschuler, *Hearings*, June and October, 1981, p. 36.

[13] Arthur E. Teele, Administrator of UMTA, *Hearings*, June and October, 1981 p. 356.

[14] Gambaccini, *Hearings*, June and October, 1981, p. 13.

[15] E.O. Pederson, *Transportation in Cities*. New York: Pergamon Press, 1980, p. 61.

[16] Wilfred Owen, *Transportation for Cities*. Washington, D.C.: The Brookings Institution, 1976, p. 29.

[17] *Total Transportation Financial Needs During the Next Decade: 1981-1990*. Washington, D.C.: American Transportation Advisory Council, April 1981, pp. 7, 19.

In 1981, sales of all new cars and of all domestic cars dropped 34 percent and 36 percent, respectively, below 1973.[19] Domestic production in that year fell to its lowest level in 20 years, utilizing less than 50 percent of factory capacity. At the start of 1982, the Administration grimly reported that at least half of the 214,000 automobile workers on indefinite layoff would probably never be rehired. As if to reinforce the Administration's prediction, the General Motors Corporation quickly announced the closing of an additional four plants and the layoff of some 60,400 workers—5,400 of them indefinitely. And a U.S. Commerce Department official stated that, even in the event of an economic upturn, there would be over a half million fewer automotive jobs in 1982 than in 1978.[20]

The picture was not much more cheerful as the year progressed. The Ford Motor Company, for example, reported a third-quarter net loss of $325.4 million—and that was considered an improvement over the same period the previous year. Even sales of diesel-powered cars—once the hoped-for answer to punishing hikes in oil prices—plunged 34 percent in 1982.[21]

Declining automobile sales and usage have exacerbated a related problem, namely, the financial difficulties of the interstate-highway system. According to the Congressional Budget Office, it would cost about $39 billion merely to complete the 26-year-old system. Sorely needed repairs and reconstruction would amount to another $46 billion.[22] In December, 1982, Congress passed a law to raise such funds by increasing the excise tax on gasoline from four cents per gallon to nine cents; it remains to be seen whether this increase will curtail automobile use, just as fare increases almost invariably precipitate a decline in mass-transit ridership.

While explanations of the reasons for the automobile crisis vary between management and labor—in particular, over comparative wage-benefit and productivity levels vis-a-vis foreign automotive workers—several broad causative factors are generally agreed upon. They include the 1973-1974 and 1979 oil-price hikes; high interest rates for auto loans; record unemployment; slippage of the dollar, especially in comparison to the Japanese yen; and foreign competition. Toward the end of 1982, for example, Japanese producers held almost one-quarter of the U.S. car market; by comparison, all foreign imports together amounted to only 6 percent of the U.S. market in 1965.[23]

But in the automotive industry, as in mass transit, knowing the proximate causes of a problem does not necessarily lead to a solution. Because both crises take place within a much larger global context—the economic straits of the industrial nations, the political volatility of the oil-producing region, etcetera—the domestic problems of both mass transit and the private automobile are expected to continue. Consequently, the traditional "transportation social contract" among employers, employees and government is being reexamined. "Low-cost, uninterrupted work-site access may not be as certain as employers once thought. Automobiles may not be as easily acquired and driven as employees once thought, and the public sector may not be able to afford the level of service it once provided. From all perspectives, the contract needs to be adjusted or perhaps completely renegotiated."[24]

The new corporate programs, which advocates say combine the strongest aspects of both traditional public and private transportation systems while avoiding or mitigating the inherent problems of each, represent a significant revision of the transportation social contract. They also reflect a further easing of the distinction between public and private sectors, or at least a recognition that standard economic categories are in a process of revision.

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[18] Gambaccini, *Hearings*, June and October, 1981, p. 14.

[19] *Motor Vehicle Facts and Figures '82*, Detroit: Motor Vehicle Manufacturers Association, 1982, Tables pp. 14, 17.

[20] *New York Times*, January 5, 14, 16, 19, 1982.

[21] *Automotive News*, October 18 and November 1, 1982.

[22] Congressional Budget Office, *The Interstate Highway System: Issues and Options*. Washington, D.C.: U.S. Government Printing Office, 1982, p. 21.

[23] Donald E. Peterson, President, Ford Motor Company, in remarks before Society of Automotive Engineers, White Sulphur Springs, West Virginia, October 8, 1982.

[24] Milton Pikarsky and Christine M. Johnson, "Transit in Transition: A New Social Contract for Urban Mobility." *Economic Development Commentary*, October, 1981.

Commuter Transportation

Five basic employee-transportation programs are operated by the 235 corporations studied. (See Chart 2.) They are carpooling, vanpooling, subsidization of mass-transit fares, use of charter or subscription buses, and management assistance to local transportation authorities. Of these five, carpooling is the most widespread, active in 160 firms, or more than two-thirds of the responding companies. The next most popular is vanpooling, employed by 135 of the businesses, or more than 57 percent. Chart 3 presents a breakdown of programs by number and percent. (The absolute numbers exceed the total of 235, because most of the companies tend to be involved in more than one type of program.)

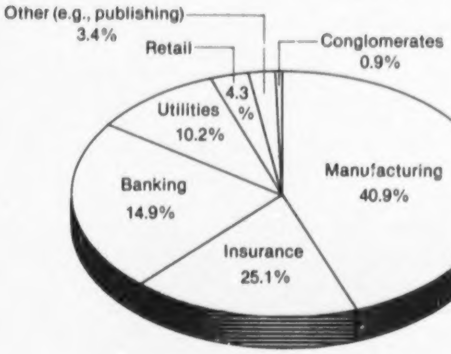
Beyond the five types of programs listed above, two other indirect functions related to transportation are employed by many of the firms to ease commuting. These are management's active encouragement of mass-transit use by employees, and work-time rescheduling—staggered hours and flextime—which affect a locality's traffic and transit systems. Finally, a number of companies engage in cooperative transportation projects with other businesses or local governments. These were listed as separate from the above programs.

Together, the corporate programs transport over 284,000 employees to and from their jobs every working day. (This figure does not include the commuters utilizing ridesharing programs operated by nonbusiness entities, such as government agencies, social organizations, religious groups, and so on.) See Tables 1 and 2.

Carpools

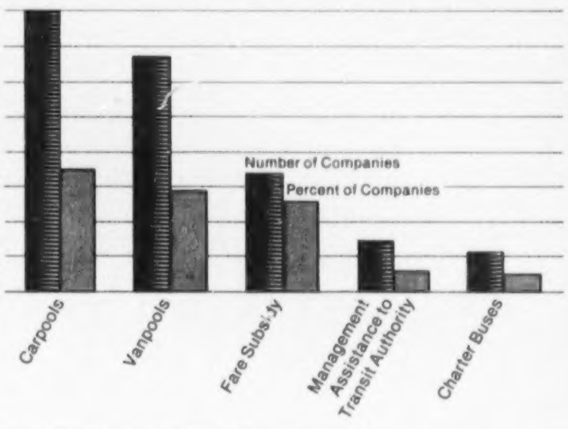
Perhaps one reason for the popularity of carpooling is that it is a very easy program to administer, and that relatively little initial investment is required by the corporation (see Exhibit 1, page 8). The primary function of the company is to match riders, usually with no more effort than helping an inquiring employee get in touch with co-workers who live in his or her vicinity.

Chart 2: Primary Industry of the 235 Responding Companies*



* Percentages do not add to 100 due to rounding.

Chart 3: Type of Transportation Program by Number and Percent of Companies*



* Most companies administer more than one type of program

Typically, an administrator will maintain an employee-card file containing names, addresses and phone numbers. Some companies simply use their preexisting employee-address cards for the purpose, others establish special cards for a separate carpool file (see Exhibit 2, page 9). The latter system would seem to insure a much higher percentage of people interested in participating.

In many cases, the card indicates whether the employee wants to be a rider only, a driver only, or both. Upon receiving a request for carpooling assistance, the administrator searches through the file for the appropriate cards, which are usually arranged by zip code, or requests an appropriate printout sheet from a data bank. It then becomes the responsibility of the employee to contact the other commuters and work out all details, including driving responsibilities, fee splitting, and the like.

In one western city, a major utility engages the free computerized carpool-matching service operated by the regional council of governments (see Exhibit 3, page 9). The firm reproduces the council's address-card format, but adds its own logo and company name. An inquiring employee then has access not only to the names of appropriate co-workers, but of commuters employed by other nearby firms in the city. Activities related to a matching operation usually include posting address cards in strategic locations, publicizing the program through employee media, and providing special parking privileges to carpool participants.

Table 1: Employees Transported by Corporate Programs (229 Companies Reporting)

	Companies	
Employees	*Number*	*Percent*
10-100	43	18.7%
100-200	22	9.6
200-400	24	10.4
400-800	23	10.0
800-2,000	23	10.0
2,000-6,000	22	10.0
6,000-22,000	9	3.9
Over 22,000	63	27.4

Table 2: Employees Transported by Corporate Programs (in Terms of Employees per Site)

Percent of Employees at Site Using the Program	*Percent of Companies*
Up to 10%	32.0%
11 to 20	25.0
21 to 40	22.2
41 to 75	13.8
76 to 98	7.0

Subsidizing Mass-Transit Fares

Nearly a third of the firms studied subsidize a part of mass-transit costs for their employees. Like carpooling, fare subsidization entails only nominal administrative costs, but the firm does not usually recoup any part of the actual subsidy in this instance.

Taking a cue from special gold-colored bus tokens issued to senior citizens, one New England manufacturing company approached the transit authority with the suggestion to make similar tokens in a different color for use by the company's own personnel. In turn, the firm would commit itself to purchasing a significant amount of these 35-cent tokens—$5,000 worth; it would then attempt to resell the tokens to its employees at half price. The authority agreed, and the program was an immediate success, with $8,000 to $9,000 worth sold that year, 1973, and each year following. "The fare has since gone up to 50 cents, and we went up with it," explained the firm's corporate office manager who conceived the idea and took the initiative in approaching the authority. Employees now purchase the tokens for 25 cents. Sales, however, are strictly limited. Workers who reside in a one-fare zone may purchase only one package of ten tokens per week; those who live in two-fare zones may buy two such packages. To further minimize administration problems and insure greater control, sales are conducted only one day a week. The annual cost to the company is around $12,000.

"We did it initially for several reasons," the manager explained. "Gasoline prices were increasing, energy conservation was important, we wanted to assist the locality's mass-transit system, and we wanted to contribute to the city's efforts to revitalize the downtown area by attracting more shoppers." The operation is especially popular with the firm's secretarial staff, which can now eliminate the daily $2.00 parking fee charged by most commercial lots.

Following the lead of that company, nine other companies—most of them large—in the same city now subsidize the fares of their employees in like manner.

Exhibit 1: Flyer on Carpooling Prepared by Utility Company for Employees

10 Tips to successful carpooling

(1) **Determine Your Route and Schedule.** Establish the morning pickup point(s) and designate a place(s) to meet for the trip home.

(2) **Draw Up a Schedule for Driving Responsibilities.** If all members of your carpool alternate driving, decide among yourselves if you want to alternate on a daily, weekly, or monthly basis.

(3) **Establish a Method for Reimbursing Driving Expenses.** If the members of your carpool do not share the driving equally, come to an understanding of how the costs will be shared and agree on payment dates.

(4) **Be Punctual.** Decide how long the driver is expected to wait. When home pickups are utilized, do not disturb everyone in the neighborhood by honking if a rider is tardy.

(5) **Establish Policies.** Smoking or nonsmoking; music and volume; eating or drinking. Your carpool will have a better chance for success if such possible irritants are discussed in advance.

(6) **Make Carpooling Serve One Purpose.** If it is for commuting to and from work, do not let it become a shopping or errand service.

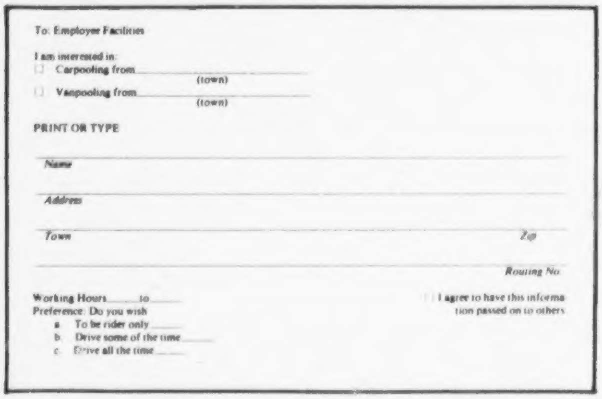
(7) **Establish a Chain of Communication.** If a driver is ill, or will not be going to work one day, an alternate driver should be notified to ensure that other members of the carpool will have a ride. If a rider is ill or will not be working, the driver should be contacted.

(8) **Drive Carefully and Keep the Vehicle in Good Repair.** This includes keeping the vehicle clean and safe. There are others involved. There should be no excuse for excessive speed, use of alcohol, or reckless maneuvers while driving.

(9) **Do Not Feel You Have to Carry on a Conversation with Your Fellow Carpoolers.** This is particularly true in the morning, when some people like a time of quiet.

(10) **If You Lose a Member of Your Carpool, call__________** for help in finding a replacement. Together we can all make ridesharing a pleasant money-saving alternative to expensive solo driving.

Exhibit 2: Carpool Card (An Insurance Company)



To: Employee Facilities

I am interested in:
☐ Carpooling from ____________
(town)
☐ Vanpooling from ____________
(town)

PRINT OR TYPE

Name

Address

Town Zip

Routing No

Working Hours ______ to ______
Preference: Do you wish
a. To be rider only ______
b. Drive some of the time ______
c. Drive all the time ______

☐ I agree to have this information passed on to others

According to a spokesperson for the authority, the "Red Token Program" has resulted in a significant increase in ridership. Although one department store briefly experimented with handing out a free red token to customers making a $5.00 or greater purchase, the tokens are now distributed only through participating firms.

Of course, the amount of the subsidy varies with the firm, and may also vary with the locality's fare structure. One bank in a western city, for example, subsidizes its employees' fares from 25 percent to 100 percent, depending upon the distance each employee travels. Workers residing far from the bank office may have to take the regional bus, which charges $60 a month for its tickets; the bank pays $12 of that amount. Other employees who live nearby take what is known as a circulator bus, which charges only $12 a month. The bank's own $12 payment thus amounts to a 100 percent subsidy for them. Two other categories of buses charge intermediate fares; the corresponding subsidies are 50 percent and 33 percent.

Here again, administration is relatively simple. One ticket book per employee is sold on the last two business days of each month, and on the first business day of the following month. The highly popular program was recommended by the bank to the transit authority five years ago, and has since been instituted by other firms in the downtown area.

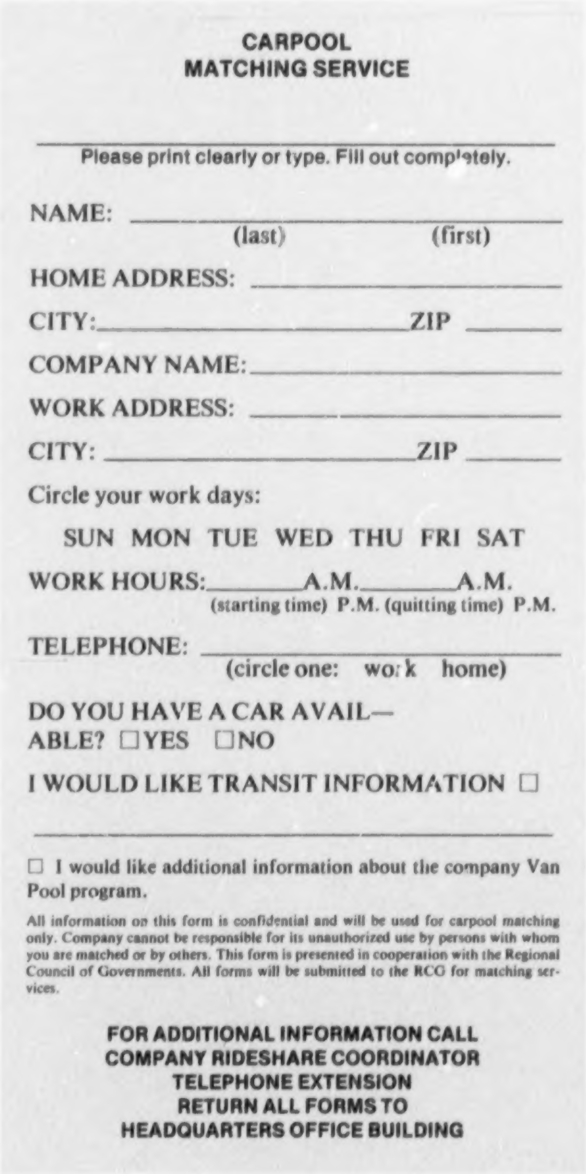
Assistance to Local Transit Authority

One out of every eight respondents indicated that they offer some form of assistance to a local transportation authority. Types of assistance include serving on areawide transit boards or task forces, conducting employee surveys for computerized metro-pool data bases, and providing technical expertise in developing and marketing alternative-fare systems for the locality.

The third largest bank in one southern city has formed an internal transportation committee that offers free services virtually on request to the municipal transit system. Consisting of vice presidents in charge of real estate, international banking, community relations, and media affairs, the committee proposed a revised fare and distribution program for the transportation authority, and has coordinated the participation of other banks in the city.

"The old fare system was not working very well," explained a member of the bank's committee. "Each ride was 85 cents—or a dollar if you didn't have the right change—and a dated monthly pass cost $30. If people bought the pass and didn't ride every day, they were throwing away money. And if they didn't have change,

Exhibit 3: Carpool Card (A Utility)



CARPOOL
MATCHING SERVICE

Please print clearly or type. Fill out completely.

NAME: ______________________
(last) (first)

HOME ADDRESS: ______________________

CITY: ______________________ ZIP ______

COMPANY NAME: ______________________

WORK ADDRESS: ______________________

CITY: ______________________ ZIP ______

Circle your work days:

SUN MON TUE WED THU FRI SAT

WORK HOURS: ______ A.M. ______ A.M.
(starting time) P.M. (quitting time) P.M.

TELEPHONE: ______________________
(circle one: work home)

DO YOU HAVE A CAR AVAILABLE? ☐YES ☐NO

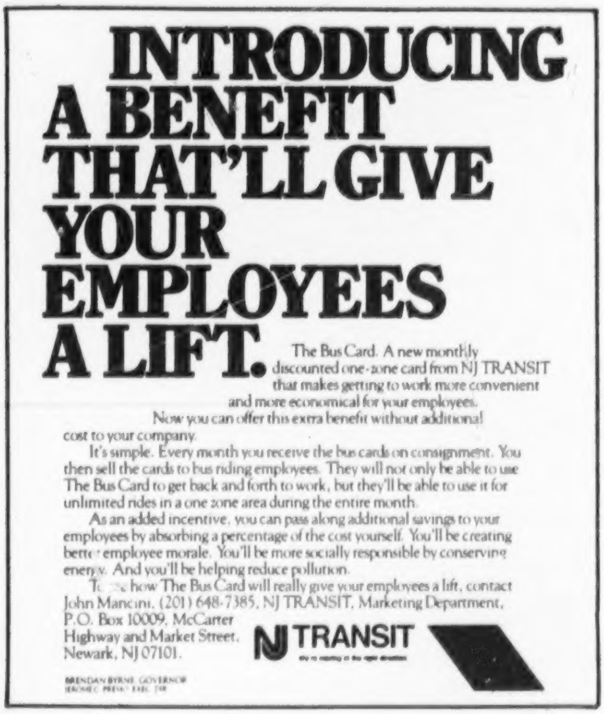
I WOULD LIKE TRANSIT INFORMATION ☐

☐ I would like additional information about the company Van Pool program.

All information on this form is confidential and will be used for carpool matching only. Company cannot be responsible for its unauthorized use by persons with whom you are matched or by others. This form is presented in cooperation with the Regional Council of Governments. All forms will be submitted to the RCG for matching services.

FOR ADDITIONAL INFORMATION CALL
COMPANY RIDESHARE COORDINATOR
TELEPHONE EXTENSION
RETURN ALL FORMS TO
HEADQUARTERS OFFICE BUILDING

Exhibit 4: How an East Coast Municipal Transit Authority Appeals to Corporations



INTRODUCING A BENEFIT THAT'LL GIVE YOUR EMPLOYEES A LIFT.

The Bus Card. A new monthly discounted one-zone card from NJ TRANSIT that makes getting to work more convenient and more economical for your employees.

Now you can offer this extra benefit without additional cost to your company.

It's simple. Every month you receive the bus cards on consignment. You then sell the cards to bus riding employees. They will not only be able to use The Bus Card to get back and forth to work, but they'll be able to use it for unlimited rides in a one zone area during the entire month.

As an added incentive, you can pass along additional savings to your employees by absorbing a percentage of the cost yourself. You'll be creating better employee morale. You'll be more socially responsible by conserving energy. And you'll be helping reduce pollution.

To see how The Bus Card will really give your employees a lift, contact John Mancini, (201) 648-7385, NJ TRANSIT, Marketing Department, P.O. Box 10009, McCarter Highway and Market Street, Newark, NJ 07101.

NJ TRANSIT

BRENDAN BYRNE, GOVERNOR

they wouldn't get on the bus. Mass transit was really hurting, and the resulting traffic jams were becoming intolerable."

The committee then proposed developing a coupon book, usable for an indefinite period of time, to be sold to the public through every branch of each bank. The authority agreed, and the committee proceeded to secure the cooperation of the other banks. "Our corporate philosophy is to take a high profile, be very active in the community," explained the spokesperson. "We serve as a corporate peer; the transit authority or the mayor can point to us as a way of influencing other business involvement." He added that, aside from helping to ease traffic congestion, the bank's activity is excellent public relations. "After all, we are competing with two other banks."

Other companies providing assistance include a manufacturing firm in an east-coast city, which authorizes its managers to conduct seminars and serve on governmental transit commissions; and a New England utility that sends its environmental-affairs staff manager around the country to actively promote ridesharing.

Charter or Subscription Buses

Only a tenth of the firms surveyed indicated that their program consisted primarily of charter or subscription

Exhibit 5: Vanpool Program Flyer

History:

In 1974, following the first fuel crisis, we started our vanpool program with a single pilot van. Since July, 1974, we have added nine vans to our program. Our ten vans serve headquarters employees residing in Brewster, Danbury, New Fairfield, New Jersey, New Milford, Newton, Stratford and Westport.

Procedure:

(1) An employee interested in forming a vanpool contacts the headquarters coordinator for the program. We identify employees living in the area from a home address printout and attempt to interest them in vanpooling by personal contact, through the Headquarters News, and through our ridesharing bulletin board in the Employee Lounge.

(2) When there are ten interested individuals plus a coordinator-driver, approval is sought from the company to proceed.

(3) The coordinator-driver draws up a Memorandum of Understanding for his group. It names the alternate driver(s), indicates the pickup points, the time schedule, the estimated monthly payment, etcetera. Copies are distributed to all interested parties for review.

(4) A meeting is scheduled to enable all participants to meet; discuss any concerns; explain the company's role; and to make certain they understand and agree with their coordinator to the terms and conditions that have been defined in the Memorandum of Understanding.

(5) At the conclusion of the meeting, if all parties are still interested and commit themselves by signing a copy of the Memorandum of Understanding, the wheels are set in motion to purchase the van.

(6) At this juncture, the coordinator-driver signs a Letter of Agreement with a representative of [company] indicating he will act as coordinator-driver for the group.

How Costs are Determined:

[Company] buys the van and the cost is spread over a 48-month period. For example, if the vehicle cost is $10,600, the purchase cost factor equals $220 per month. Added to this is cost for insurance. In 1980, the annual premium cost is $480 per vehicle. Dividing this by 12, the monthly cost becomes $40.00. Adding these together, monthly payment to the company is $260.

The coordinator then determines his operating costs, allowing for the accumulation of contingency funds, and arrives at the monthly charge per rider. These monthly charges may fluctuate, up or down, at the discretion of the group, based on actual experience. The coordinator is a nonpaying member.

buses. In brief, such a program generally entails leasing or purchasing one or more buses (school buses tend to be popular with associations; construction buses are also used). Administrators also secure a trained, licensed driver, establish routes, and insure compliance with—or obtain exemption from—local regulations governing the use of mass-transit buses. According to the U.S. Department of Transportation, the major advantage of buying a bus is one of cost control, as leasing can be expensive. One of the major disadvantages of purchasing is administrative encumbrances.

Vanpooling

Probably the best known of the corporate transportation programs, vanpooling is administered by over 57 percent of the responding companies. As noted in the introduction, the number of vanpools in use by business and nonbusiness entities has grown enormously during the past decade. Annual conferences held by the National Association of Van Pool Operators (NAVPO) now attract vanpool operators from Mexico, Canada and England as well as the United States, and offer a wide array of technical workshops—state legislation, automotive innovations, marketing techniques, employee participation, and so on.

Several major companies have prepared "how to do it" kits, and at least one major insurance firm has developed a widely shown slide presentation. That company also offers van-driver-education classes. The U.S. Department of Transportation funds a considerable amount of research and demonstration van pool projects, and the U.S. Department of Energy has prepared several relevant vanpooling studies. (See appendix for corporate and government sources.)

Types of Vanpools

Company-purchased, leased, third-party, and owner-operated vans are the four types of vanpool programs employed by the firms. Of the 135 companies using vanpools, two-thirds conduct them with vans purchased by the firm itself, sometimes in combination with the other three forms. Another quarter of the programs utilize leased vans, again either by themselves or in some combination. The use of third-party vanpools—independent ridesharing services—accounts for 16.3 percent, and 12.2 percent are owner-operated, which means that the vans in the programs are owned by the respective drivers. The bulk of the owner-operated vanpools is used in conjunction with one of the other forms, whereas the bulk of the company-owned vanpools tends to have limited participation by the other forms.

The benefits of each type of vanpool operations will vary with the firm, and will depend on such factors as the number of of vans to be used, the desired level of administrative involvement (which includes maintenance responsibility), the cost of leasing versus owning over a period of time, and the like.

Fares

While some of the vanpool programs leave fare calculations to the driver, particularly in owner-operated pools, most devise a formula consisting of the monthly operating and fixed costs of the van, divided by the number of passengers (sometimes excluding the driver). The resulting figure may then be decreased by whatever amount, if any, the company wishes to subsidize (see Exhibits 6 and 7). Most firms tend to absorb administrative and overhead costs, estimates of which range between $2,000 and $20,000 annually for major firms.[25]

Examples of fare-computation formulas given by respondents include:

- "Fixed cost of vans minus the salvage value, minus a five-year depreciation cost, plus insurance and registration fees, plus a variable cost that includes estimated maintenance and gasoline charges."
- "Cost of vehicle, plus operating costs, less tax rebates equals monthly cost."
- "Round-trip miles per day times an average 21 days per month equals round trip miles per month, times a variable cost of $0.18 per mile equals the variable cost per month. This variable cost plus a fixed monthly cost of $164.28 equals the total monthly cost. That figure, divided by the number of passengers, equals the fare."
- "The firm subsidizes the total costs of the van program by approximately 25 percent. Total costs include all mileage-related operating costs as well as depreciation, interest, insurance and license. Vans are depreciated six years or to 100,000 miles, whichever is first. Our fare schedule is divided into different zones according to round-trip mileage, and is based on a ridership level of ten paying passengers."
- "Mileage rate is calculated to recoup the purchase price of the vehicle (minus a 10 percent investment tax credit and an assumed percent for salvage value), as well as projected maintenance cost over the life of the van (five years or 75,000 miles)."
- "Leased cost plus operating cost divided by number of passengers, based on a 21-day month."
- "Total costs divided by number of passengers. The driver rides free, and the backup driver pays three-quarters of normal passenger fare."
- "Riders share equally in monthly leasing cost of vans, plus proportionate share of operating costs based on number of miles."

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[25] U.S. Department of Transportation, *How Ridesharing Can Help Your Company: A Manual for Employers.* Washington, D.C.: May 1980, page 39.

(text continued on page 14)

Exhibit 6: Vanpool Cost and Fare Calculation

		Sample	Your Van
A	**Calculate the monthly fixed cost of a purchased vehicle**		
1	Cost of the van	$11,000	
	Less salvage value (after 4 years)	- 3,300	
	Equals depreciable value	7,700 or	$160/month
2	Add other annual expenses:		
	License, registration, taxes	120	
	Insurance	+ 460	
	Equals other fixed expenses	$ 580 or	+ 48/month
3	Monthly fixed cost (items 1 plus 2 above)		208/month
4	Add optional maintenance contract		+ 45/month
	Total monthly fixed cost		**$253/month**
B	**Or calculate the monthly fixed cost of a leased vehicle**		
1	Start with your monthly leasing cost		$240/month
2	Add maintenance contract (if not in lease)		+ 45/month
3	Add insurance (if not in lease)		+ 40/month
	Total monthly fixed cost		**$325/month**
C	**Calculate per mile operating costs for purchased and leased vehicles**		
1	Start with the cost of gasoline ($1.10/gal ÷ 10 mi/gal)	$0.110/mile	
	If you included a maintenance contract on A or B, gas is your only per-mile cost. Otherwise:		
2	Add the cost of oil change, filter and lubrication	0.005/mile	
3	Add other maintenance cost	0.025/mile	
4	Tire costs over the life of the van	0.010/mile	
	Total operating cost/mile	**$0.15/mile**	
D	**Calculate passenger fares**		
1	Start with each van's daily round trip distance	50 miles	
2	Multiply this by your average number of workdays in a month	x 21 = 1,050 miles	
3	Multiply this by your per mile operating cost from C	x $0.15 = $157/month	
4	Add the van's monthly fixed cost from A or B	+ $208 = $365/month	
5	Divide this cost by your break-even number of passengers	÷ 9 = **$40/month**	

Source: Vanpool Implementation Handbook, U.S. Department of Energy 1979, amended 1980.

From U.S. Department of Transportation, *How Ridesharing Can Help Your Company*, Washington, D.C. May 1980.

Exhibit 7: How One Utility Calculates Vanpool Fares

VANPOOL FARE CALCULATION WORKSHEET

A		**Assumptions**	
	1	Life expectancy (Van)	________Years
	2	x Working days per year	253
	3	= Total trips	______trips
	4	Operating cost	____Cents/mile
	5	Registration cost (x yrs.)	$____________
	6	Insurance cost (x yrs.)	$____________
B		**Calculation of Trade-in Values**	
	1	Round trip miles per day	______miles
	2	x no. trips =	______miles
	3	x 1.01 (1% maintenance allowance) =	______miles
	4	x 1.10 (10% personal mile. allow.) =	______miles
	5	Rounded to nearest 5,000 miles	______miles
	6	Yields trade in %	______%
	7	x Basic purchase price (no tax or reg.)	$____________
	8	= Estimated trade-in value	$____________
C		**Calculation of Investment Tax Credit**	
	1	Basic Purchase Price (B-7)	$____________
	2	Plus 5% sales tax =	$____________
	3	1 year registration fee =	$____________
	4	Total (C-2 + C-3)	$____________
	5	x 10% ITC (C-4	$____________
D		**Calculation of Time-Factor Costs**	
	1	Purchase price + sales tax (C-2)	$____________
	2	________year registration (A-5)	$____________
	3	________year insurance (A-6)	$____________
	4	Sub-total	$____________
	5	Less ITC (C-5)	$____________
	6	Less trade-in value (B-8)	$____________
	7	Total time-factor costs	$____________
E		**Calculation of Distance-Factor Costs**	
	1	________year round trip mileage (B-3)	______miles
	2	x Operating cost (A-4)	____Cents/mile
	3	= Total distance-factor costs	$____________
F		**Fare Calculation**	
	1	Total time-factor costs (D-7)	$____________
	2	Total distance-factor costs (E-3)	$____________
	3	Subtotal; total cost to passengers	$____________
	4	Adjustment, if applicable	$____________
	5	÷ Number of months (A-1)	______months
	6	= Monthly revenue objective	$____________
	7	÷ Number of paying passengers	________
	8	= Monthly FARE per passenger	$____________
G		**Calculation of the Amortization**	
	1	Total time-factor costs (D-7)	$____________
	2	÷ Number of months (A-1)	______months
	3	= Monthly amortization (includes insurance)	$____________

(text continued from page 11)

Establishing the Program

A major oil company, which presently operates a fleet of 294 vans in 18 cities—transporting over 3,300 employees for an average round-trip commute of 50 miles—suggests a five-step plan for the establishment of a vanpooling operation. The steps are:

(1) Create a task force to visit an existing operation elsewhere, and then explore such issues as local taxes, legal restrictions, insurance availability, etcetera;

(2) Recommend to the CEO establishment of a small-scale pilot project;

(3) Select an administrator who would canvass employees to determine interest, calculate fares, develop policies, prepare informational materials, and make other arrangements;

(4) Buy or lease the vans, secure maintenance service, interview potential drivers;

(5) Monitor the pilot project to determine its success or failure, and make appropriate recommendations to the CEO.

Indirect Programs: Flextime, Staggered Hours, Transit Advocacy

Two efforts to ease public traffic congestion and transit peak/off-peak hour imbalances are used by almost half of the firms. Flextime schedules, which permit employees to moderate their own working hours, are employed by a quarter of the companies; staggered hours, under which workers start and leave work at intervals rather than all at once, are used by one in ten.[26]

Some of the firms utilize both types. Encouragement of mass-transit use is another indirect, if minimal, way corporate management has become involved in commuter transportation. Forms of encouragement usually consist of brochure distribution and sign posting. (Fare subsidization, discussed earlier, is, of course, a direct program.)

Costs

As indicated earlier, the administrative and overhead costs of the programs tend to be absorbed by the firm. They are difficult to ascertain with precision, because the cost-incurring operations are usually performed by existing employees utilizing equipment, space and procedures already in place. The concrete costs—fare subsidies, vehicles, subscription bus fees—vary dramatically: from a low of about $250 for a small business, to a high of $5 million for one of the country's largest vanpool operations. But even that latter figure is misleading, since the recoupment by that firm is 75 percent.

Only 87 firms, or 35 percent of the respondents, provide annual operating cost data. Of these, about 40 percent spend up to $25,000; a quarter spend between $25,000 and $100,000; and the rest spend over $100,000. (See Table 3, below.)

Actual expense to the firm, however, can be minimal. Over two-thirds of the companies responding state that they get back between 75 percent and 100 percent of their nonadministrative expenses, and over a third recover the full amount. (See Table 4, p. 15.) These are the points stressed by many corporate ridesharing advocates: The firm need pay little or nothing; employees save in terms of gasoline, fares, parking fees, the price of a second automobile and other expenses connected to a single-occupancy vehicle driving; and the public saves in terms of energy, pollution abatement, and so forth. The argument is: "Everybody wins."

Asked how they regain their costs, 111 firms, or over 47 percent of the responding companies, charge commuter fares—around half of them through direct cash, two-fifths through payroll deductions, and the rest via a combination. Tax credits and depreciation on vehicles are two other recoupment devices, used respectively by 15 percent and 12 percent of the firms.

Administration

The personnel department appears to be the staff unit most often charged with administering a transportation

Table 3: Program Costs

Estimated Annual Costs
for All Types of Programs
(87 Companies Reporting)

Cost	Percent of Companies[1]
Up to $25,000	46.1%
$25,000 to $50,000	5.5
$50,000 to $100,000	18.0
$100,000 to $200,000	12.2
$200,000 to $600,000	10.0
Above $600,000	5.5

Fare Subsidies
(42 Companies Reporting)

Cost	Percent of Companies
Up to $10,000	33.6%
$10,000 to $20,000	26.2
$20,000 to $40,000	9.6
$40,000 to $100,000	12.0
$100,000 to $300,000	14.4
Above $300,000	4.2

[1] Percentages do not add to 100 due to rounding.

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[26] For a fuller discussion of flextime, see Harriet Gorlin, *Company Experience with Flexible Work Schedules*, The Conference Board, Research Bulletin No. 110, 1982.

Table 4: Costs Recovered (94 Companies Reporting)

Percent Recovered	*Percent of Companies*[1]
Up to 25%	6.4%
26 to 50	11.8
51 to 75	17.1
76 to 100	65.0

Note: A little over 35 percent of the firms recover 100 percent of their costs.

[1]Percentages do not add to 100 due to rounding.

program, probably reflecting the origins of the program as an employee benefit or service. According to the survey data, half of the programs are operated by the personnel function, with a small group administered jointly by personnel and another functional unit.

About a tenth of the companies have established a special division to handle program details. The remainder of the programs are run, in declining order, by the following departments: transportation, plant and building, fleet and office services. Only 1.3 percent of the programs are operated entirely by the employee participants, and an even smaller percentage by a company's engineering division.

Almost two-thirds of the programs function on the day shift, and the other third serves both day and night work shifts. Programs seem to be popular with all categories of employees, from blue-collar workers to management. The most numerous participants tend to be office workers; almost 90 percent of the programs are used by them. This high percentage may reflect that nearly half of the firms responding to the survey were insurance companies, banks, and retailers—all labor-intensive industries employing a high percentage of clerical workers.

The extent of administration, again, will depend on a number of factors, primarily how much responsibility management wants to assume. Regardless of the degree of this involvement, however, all programs require certain responsibilities by the participants. For example, pool riders are expected to be at the pickup station on time, and drivers are often instructed to wait no more than two minutes. Passengers are also expected to inform the driver when they will not be riding, and are usually prohibited from subleasing their seats unless the plan specifically allows for such an arrangement. Substitute riders may pay a slightly higher fare. Refunds for absences are not popular. (See Exhibit 8.)

Perhaps the most important aspect of any program's administration, judging by the responses, is its flexibility, particularly in vanpooling programs. Such issues as routes, smoking regulations, driver alterations, pool formation, courtesy pickups, and so forth tend to be arranged according to the needs of the riders. As those needs change over time, usually accompanying increased participation, operating procedures will require a fair degree of flexibility if the pool is to contiunue. In fare subsidization programs, management flexibility becomes an issue when mass-transit fares increase; a decision must be made on continuing or altering (up or down) the percentage of subsidy.

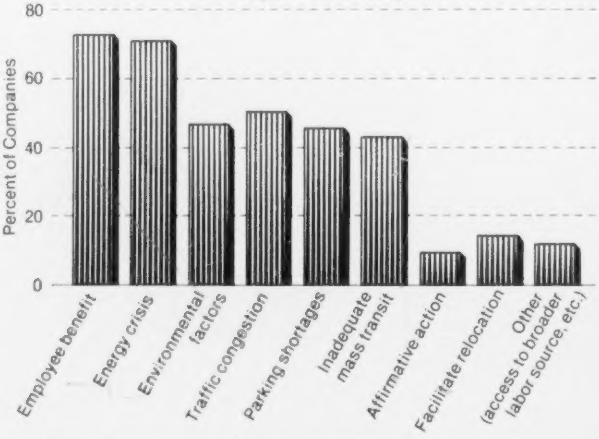
Why Programs Were Established

According to much of the literature on paratransit, it was the energy crisis precipitated by the drastic OPEC (Organization of Petroleum Exporting Countries) oil-price hikes in 1973-1974 and in 1979 that served as the major impetus for decisions to establish a transportation program. This finding is borne out by the survey data, as three-quarters of the firms indicated that reason as a prime incentive for undertaking their projects. However, the energy crisis does share the spotlight with another motivation—the desire to provide an employee benefit—which was cited by 72.8 percent of the responding firms.

Almost all of the companies, incidentally, cited more than one major reason. In addition to, or apart from, the above two factors, about half the firms were motivated by the following: environmental considerations such as air pollution, traffic congestion near the worksite or in corridors leading to the site, a shortage of parking facilities, and inadequate mass transit. (The relative percentages appear in Chart 4, below.)

Two other reasons—affirmative action or the provision of transportation to and from minority residential areas, and the desire to facilitate plant or headquarter relocations—were also cited by several of the respondents. A small minority of the firms also mentioned some additional factors, such as the desire to assist

Chart 4: **Primary Reason for Starting Transportation Program***



* Almost all companies reported more than one primary reason

Exhibit 8: Company Van Plan—A Voluntary Program

VAN DRIVERS

Selection

(1) Drivers will be selected by the Pooling Task Force, following receipt of a written recommendation by their supervisor.
(2) Drivers must be reliable, have a very low incidence of absenteeism, do very little company-imposed travel, and have a safe and clean driving record, as indicated by an absence of highway violation "points" on the drivers license.

Responsibilities

(1) The driver is key to the successful operation of the van and is completely responsible for routing, pickup points, scheduling, passenger lists, and operating cost.
(2) Driver must develop a list of minimum of ten passengers, and a waiting list of several more, all company employees, for Task Force review. Should the van load drop below the minimum of ten passengers, the driver must replenish the pool within 30 days.
(3) Drivers are responsible for keeping the vans clean inside and out, for all maintenance and service requirements, state-required inspections and licensing, and all operating costs.
(4) Supply a secure place for "at home" parking of the van, preferably in a locked garage.
(5) Both driver and co-driver should be prepared to bring passengers to work in personal cars in case of van failure; they will be reimbursed at their van's daily rate.

Operation

(1) Operation of the unit is permitted only by the driver-coordinator and backup drivers. Only under emergency conditions will any other person be permitted to operate the vehicle. In this connection, in the absence of both the driver-coordinator and the backup driver, any company employee that is a member of the vanpool may operate the van for pickup and delivery of passengers to and from work if he or she is authorized to do so by the driver-coordinator and is properly licensed.
(2) Safe courteous driving habits, consistent with complete observance of all traffic regulations are of the utmost importance. Any citation resulting from a moving traffic violation while driving the van is a responsibility of the driver-coordinator and/or backup driver. The driver-coordinator and/or backup driver agrees to report to the company any citation resulting from a moving traffic violation, whether committed while driving the van or any other vehicle.

downtown revitalization efforts, government requirements or mandates, and a technique to attract employees.

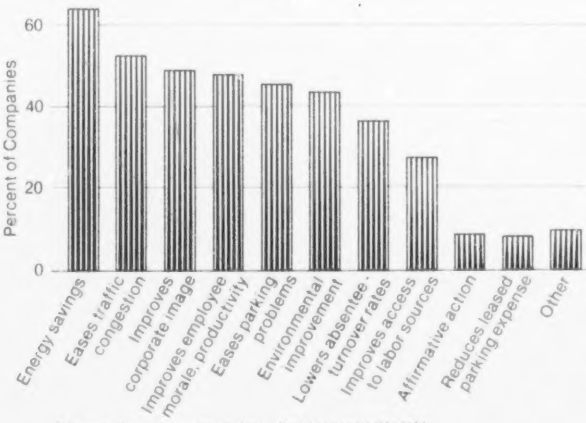
Principal Benefits

If the energy crisis was one of the reasons most often cited for beginning a commuter-transportation program, it was also the most commonly cited principal benefit—over two-thirds—of continuing the program. Other significant benefits, according to the survey, were reduced traffic congestion, an enhanced corporate image in the community, a more efficient use of the parking area, improved employee morale (which it is believed translates into higher productivity), and improvements in the quality of the environment. Fewer companies cited the following benefits: lower employee absenteeism or lateness, access to a broader labor source, affirmative action (transporting employees living in minority neighborhoods) and a savings in leased parking expenses. (See Chart 5 for breakdown.)

Promoting the Transit Program

The most common form of promoting the program to employees consists of describing it in company newsletters and staff memos. Four-fifths of the firms with programs use this method, often exclusively. Newsletter essays either tend toward the very factual—describing operating procedures, routes, fares, responsibilities—or they are conversational, with a good deal of human-interest appeal. Exhibit 9 on page 17,

Chart 5: Principal Benefit*



* Almost all companies reported more than one principal benefit

Exhibit 9: Article on Vanpooling from Employee Newsletter

Confessions of a Reformed Commuter

A year and a half ago we formed a van pool to Kenilworth. I was halfhearted about it; I think we all were. We all like the freedom of four wheels to call our own; and most of us resist more structuring, more organization on our already well-structured, well-organized lives. From the moment we reach for the morning toothbrush until the moment we turn off the late news and set the wakeup alarm, it strikes each of us that our day has been completely structured, completely organized. It's small wonder we all cherish unstructured time—a rare evening with no P.T.A., no report to be compiled, a Saturday afternoon just watching a ball game, or playing in one. This is why the American work force jealously guards commuting time. We all *have* to get there, but *how* we get there is ours to decide—unstructured time—in a time-structured world, a freebie.

I hadn't been a member of the van pool for two weeks when I discovered the flip-side of the structured commutation coin—not surprisingly, quite literally, *coins*—nickels, dimes and quarters that were no longer aimed at Parkway toll baskets, but weighted my wallet instead. Trips to the gasoline station became infrequent; and as time went on, the monthly statements from my favorite oil companies became modest.

There were other surprises: The tires of my car took on a rested look. Then the windshield wiper blades began to look rested. Finally, even the upholstery began to look rested; and it dawned on me the carburetor, distributor, the transmission were all getting a nice rest too. The chronological age of my car doesn't mean much anymore. Its youth is proclaimed on the dashboard—low, low mileage. To van poolers our cars have the look of cars that will be around for a long time.

There are other benefits. It's nice to sit back and leave the driving to someone else. (The drivers, of course, are the *real* heroes of the Program.) It's nice to study the Dow Jones rather than a tailgater in the rear-view mirror, read a who-dun-it rather than the bumper stickers, window stickers, and license plates of hundreds of cars up ahead. It's pleasant to fall asleep in a traffic tieup instead of fuming. It's good to forget about driving altogether and just look at the New Jersey roads, trees, houses, clouds, all in moving Panavision.

The strangest benefit of all was unforeseen—I feel better about myself. I felt guilty when I was driving my own car to the office every day, guilty because I was not helping the national conservation effort in any way. I don't feel that way anymore—*how about you*?.

reprinted from a New Jersey manufacturing company's newsletter, is an example of the latter type. Written in a humorous vein by a vanpool participant, the article describes the author's initial hesitation based on the supposed freedom of "four wheels to call [his] own" and a resistance to any more "structuring" of his life. It goes on to describe the steady change in his attitude as he discovers the various benefits of vanpooling—from more coins in his pocket to the freedom to "fall asleep in a traffic tie-up instead of fuming."

All other promotional methods combined—public announcements and advertisements, staff meetings particularly for new employees, and audio visual productions, among others—are used by a little over half the firms. Examples of some of the methods include: brochures (see Exhibit 10, p. 18), manuals containing administrative and cost computation information, ridesharing surveys, placement of large maps and ridesharing routes in public access areas like cafeterias and hallways, articles in the mass media, company logos or signs on the vans or other program vehicles, and word of mouth.

Manuals tend to be fairly extensive, explicit, and clearly written. One firm's operations manual, prepared in loose-leaf form for easy alterations, has sections dealing with virtually every aspect of the operation. (See the manual's table of contents, Exhibit 11, page 19.) Each section has step by step instructions, exemplified by the following page entitled "Maintenance Performed by Driver":

> "For convenience purposes, as well as to help cut program costs, the driver may choose to perform the following items:
>
> (1) Change oil and filter. Driver will be reimbursed $4 labor plus cost of six quarts oil and filter.
>
> (2) Lube chassis. Driver will be reimbursed $2 labor plus cost of the grease.
>
> "*To request reimbursement,* driver fills out 'Request for Reimbursement' form, attaching receipts and an itemized statement of parts and labor charges. Vendor's statement must provide odometer reading and van number."

See Exhibit 12, on page 20, the company's guide to preventive maintenance.

Another firm operating a large number of vanpools at numerous sites has prepared a complete kit on different

Exhibit 10: Employee Brochure

GENERAL

The primary objective for implementing a Company Vanpool program is to conserve energy resources by reducing the number of vehicles commuting to and from work. This program also provides employees an economical alternative for commuting to and from their work location.

WHAT IS A VANPOOL?

An employee vanpool consists of 14 employees who live in the same geographical location and work at the same facility. Also available are Commuter Vehicles accommodating 10 and 12 passengers.

HOW IS A VANPOOL ESTABLISHED?

Routes are established by the Vanpool coordinator to accommodate the paying passengers and a driver in geographically convenient areas. A minimum number of passengers will be required. One employee must agree to be the primary driver with a *minimum* of two employees agreeing to be back-up drivers.

WHO IS ELIGIBLE TO JOIN?

All regular, new normal and part-time employees; however, new normal and regular employees who will be riding in a van five days a week will have priority. Intermittent and contract employees may ride *only* with approval from the Commuter Center.

WHO DRIVES THE VAN?

A Company employee who has been trained by instructors and is in possession of a valid California Class 2 driver's license. The driver rides free; the back-up driver(s) rides free only when he or she drives.

HOW DO I PAY?

All regular, new normal and full-time temporary employees' fares are handled through Payroll Deduction. All others pay by check payable to the Company for those days they ride.

WHAT ARE THE RATES?

The minimum fare for participation in the Vanpool program will be based on the roundtrip mileage of 40 miles.

Roundtrip Mileage	Bi-weekly Rate
0 — 40 miles	$24.00
41 — 60 miles	28.00
61 — 80 miles	31.00
81 — 100 miles	35.00
101 — 120 miles	38.00
121 — 140 miles	42.00
141 — 160 miles	46.00

DO I PAY WHEN I DON'T RIDE?

Yes. Fares will not be reduced to allow for sick leave, vacation, or other absences; however, a participant may lease his/her space during an absence to another employee. *NOTE:* A participant who is required by the company to provide his/her own transportation may be eligible for reimbursement of the daily vanpool cost. Refer to the *"Vanpool Policy and Procedures Guide."*

WHO IS RESPONSIBLE FOR SERVICE AND MAINTENANCE OF THE VANS?

The Automotive Services Department. All service, including gassing, maintenance and washing is performed at the facility where the van is based.

WHAT HAPPENS WHEN A VAN BREAKS DOWN ENROUTE?

When the Commuter Center is notified of a van breakdown, a backup van is dispatched to enable the passengers to complete their trip with minimum delay.

HOW DO I JOIN A VANPOOL?

Any employee interested in joining a vanpool should obtain a registration/questionnaire form from the EMPLOYEE COMMUTER CENTER.

aspects of its operations, which it has distributed to the public. The kit contains a brief fact sheet, photographs, information on beginning the program, cooperative agreements between the company and the driver, vanpool economics, service schedules, and driver documents (logs, passenger lists, revenue and mileage reports, anticipated absences).

A large brewery in a western city has prepared an attractive, four-page full-color brochure, sporting a large photograph of the company's van and its smiling ridesharing employees. The two inside pages contain illustrations and descriptions of the benefits and techniques of the firm's ridesharing programs, with several telephone numbers for additional information.

Beyond the use of informational materials, many companies offer special incentives to their employees to participate. The two most common are the provision of free rides for the drivers (and sometimes backup drivers), and permission for the driver to retain use of the van on weekends or after working hours. Just over half the programs offer free rides, and almost 40 percent offer van retention. A small number of companies (5.1 per-

Exhibit 11: Contents Page from Ridesharing Operations Manual (A Utility)

COMMUTER POOLING OPERATIONS MANUAL

- 100 INTRODUCTION
  - 100-1 Purpose
  - 100-2 Overview
  - 100-3 Program Organization
- 200 DRIVERS
  - 200-1 Primary Driver
  - 200-2 Temporary Change in Primary Driver
  - 200-3 Backup (Alternate) Drivers
  - 200-4 Emergency Drivers
  - 200-5 Combining Vanpools
  - 200-6 Swapping Vans
- 300 PASSENGERS
  - 300-1 Priority
  - 300-2 Responsibilities
- 400 MAINTENANCE
  - 400-1 Warranty Work
  - 400-2 Special
  - 400-3 Preventive
  - 400-4 Performed by Driver
  - 400-5 Tires
  - 400-6 Independent Accounts
  - 400-7 Backup Vans
- 500 MILEAGE REPORTS
- 600 EMERGENCY CARPOOLS
- 700 INSURANCE
  - 700-1 General Coverage
  - 700-2 Accident Reporting Procedure
- 800 MAILING LIST
- 900 FARES
  - 900-1 Annual and Hourly Salary Employees—Payroll Deduction
  - 900-2 Non-Co. and Hourly Employees (Other than Hourly Salary Policy)
  - 900-3 Route Changes
  - 900-4 Vans Commuting 7 Days Per Week
  - 900-5 Submitting Revenue Payments
  - 900-6 Reimbursements for Outages
  - 900-7 Reimbursements for Shift Changes, Overtime
- 1000 CREDIT CARDS
- 1100 SMOKING/ALCOHOL
- 1200 FLEXITIME SCHEDULES
- 1300 VAN ACCESSORIES
- 1400 PARKING
- 1500 CITY, STATE, FEDERAL LAWS
- 1600 RIDESHARING CENTERS

cent) allow drivers to keep a portion of the fare. This figure might increase if the additional money to the driver was excluded from income taxation, according to a number of administrators. The other generally accorded incentive is parking privileges provided to pool operators.

Problems

Employee apathy is, by far, the problem most commonly encountered by companies seeking to establish or operate a commuter-transportation program. (See Chart 6, page 21.) Nearly two-thirds of the administrators cited this issue, compared with only a fifth citing the next most common problem—administrative difficulties. One large bank in San Jose described it this way: "Employee apathy in this area is tremendous and difficult to overcome. For example, a five-question survey dealing with commuter patterns appeared in [our] monthly newsletter, with a request to return. The response was 14 out of 1,200, or 1.2 percent. Another questionnaire concerning vanpooling received the same response rate."

A security manager for a northwestern manufacturing company explained: "We employ approximately 1,300 individuals at our main site. In recent years, we have tried various employee transportation programs, including subsidy of the major portion of expense of a bus service for employees. All attempts have been less than enthusiastically received. Lack of interest is primarily due to the general rural makeup of the majority of employees combined with our necessary multishift work schedule."

Another executive commented: "For about one-and-a-half years, during 1980-1981, we offered the following incentives at three of our local facilities: (1) Any employees who carpooled on a regular basis were eligible to enter a quarterly drawing. The winner received a $100 credit-union savings deposit; (2) Any employee who rode the bus regularly could receive one-half the price of a monthly transit pass from the company; (3) We made Ride Share material available to all employees and publicized the services that Ride Share offers." Incentives were discontinued in 1982, according to the executive, because of employee apathy, shift rotation, and inconvenient bus services.

Even among the 290 companies that have no programs, almost a fifth said they do not plan to start any because of employee apathy (see Chart 7, page 21). Some of those firms said that the leveling off of gasoline prices is a contributing factor to apathy.

Examples of administrative problems encountered by program directors include the following: lack of immediate termination information needed to delete employees from payroll-deduction procedures; difficulty in tracking work locations; logistical and scheduling problems; inadequate staff support—both clerical and backup drivers; incapacity in the face of rapid program growth; driver errors on expense reports and other forms;

Exhibit 12: Preventive Maintenance Checklist

With proper preventive maintenance you can avoid major mechanical problems and unnecessary bills, which will help keep the costs and fares down. In performing routine maintenance the best guide to follow is the owner's manual. The following is a list of items that need to be performed at every 5,000, 10,000 and 20,000 mile interval.

	5,000	10,000	15,000	20,000	25,000	30,000	35,000	40,000	45,000	50,000	55,000	60,000	65,000	70,000	75,000	80,000	85,000	90,000	95,000
Change Oil and Filter	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Lubricate Chassis	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rotate Tires	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Inspect Fluid Levels:																			
Power Steering	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Transmission	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Rear Axle	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Brake Master Cylinder	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X	X
Check and Service Cooling System		X		X		X		X		X		X		X		X		X	
Apply Solvent To:																			
Carburetor Choke Shaft and Fast Idle Cam and Pivot Pin		X		X		X		X		X		X		X		X		X	
Replace Air and Fuel Filters				X				X				X				X			
Analyze Firing System																			
Apply Solvent To: Manifold Heat Control Valve				X				X				X				X			
Check Crankcase Inlet Air Cleaner				X				X				X				X			
Service Transmission				X				X				X				X			
Inspect, Clean, and Lubricate Front Wheel Bearings				X				X				X				X			
Check U-Joints				X				X				X				X			

employee turnover; coordination of departments (i.e., middle-management problems); difficulty in matching employees due to personal preference; and poor general communication.

Other problems encountered in administering the programs include: obtaining top-management support (which may indicate a need for more effective communication to the CEO on benefits and costs of the program); regulatory or legislative difficulties, such as the absence of a clear ridesharing law or guidelines; objections from commercial carriers such as taxi fleets and private buses; objections from mass-transit authorities; and, surprisingly, one case of an objection from a commercial third-party vanpool operator!

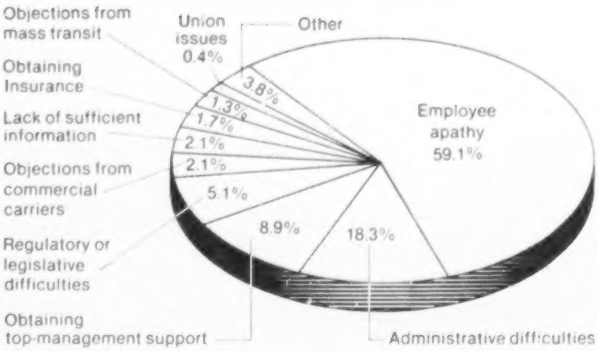
Recommendations for Changes in Public Policy

Perhaps because of the relatively recent starting dates for most corporate transportation programs, few respondents offered recommendations for public-policy changes. Of those who did comment, most focused on the issues of government taxation at both state and federal levels, and on workers' compensation.

Concerning state-tax policy, recommendations called for either an elimination or a reduction in state property, excise and sales taxes for ridesharing vehicles and fuel. Alternatively, tax rebates or credits were suggested. One company felt that employers should receive tax credits because the corporate transportation programs assist "core city residents" in gaining access to employment.

On both the federal and state levels, it was recommended that neither transit subsidies nor fare retention by pool drivers be counted as income, and that vanpool fares should be tax deductible. Respondents also sought a change in the Energy Tax Act of 1978, which allows a 10 percent investment tax credit only for ridesharing vehicles that use 80 percent of the mileage for actual com-

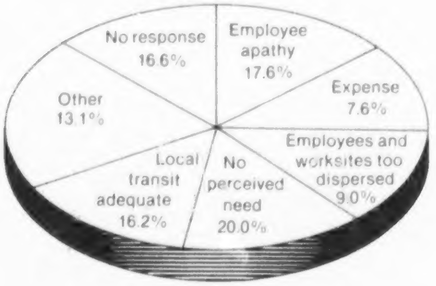
Chart 6: Common Problems Encountered in Establishing or Operating the Programs*



*Percentages do not add to 100 due to rounding

Chart 7: Reasons for Refusal to Establish Program*

(290 Companies Reporting)



* Percentages do not add to 100 due to rounding

muting.[27] In firms that offer drivers an incentive of using more than 20 percent mileage for personal or noncommuting use, the tax credit is jeopardized. Some also called for an increase in the size of the credit itself.

The major problem with workers' compensation insurance concerned lack of clarity as to whether ridesharing employees were covered in the event of vehicular accidents. Beyond calling for clear guidelines by the regulatory agencies, most respondents felt that workers' compensation should not apply, since coverage would serve as a disincentive to corporate ridesharing. One firm did want the coverage, and another suggested that the law should be changed to facilitate multiemployer ridesharing.

Similar concerns were expressed over insurance and corporate liability. Legislation was called for to allow insurance companies to spread the risk on ridesharing vehicles.

Community Awareness

The Urban Mass Transportation Administration has awarded numerous demonstration grants to localities undertaking innovative transportation projects, including community-ridesharing methods. In an effort to find out how familiar corporate administrators were with paratransit programs—either government or corporate sponsored—in their vicinities, The Conference Board asked respondents the following question: "Are you aware of a ridesharing program in your community?"

Of the 235 firms now operating programs, 186 said they were aware, 25 said they were not, and 24 did not respond. Of the 290 firms that do not have programs, 139 said they were aware, 116 said they were not, and 35 did not reply.

Other recommendations included: establishment of ridesharing parking lots—or authorization of sections of existing large lots (such as those owned by supermarkets)—for ridesharing vehicles; reduced parking-lot requirements for new corporate buildings; vanpool use of bus lanes and tunnel approaches; additional high-occupancy-vehicle (HOV) lanes on highways; low interest loans or other government assistance to ridesharing; allowing self-insured companies to take on outside (nonemployee) riders; and increased government support for traditional mass transit.

One corporate expert, who has presented numerous workshops on transportation programs, offered the following recommendations to corporations, local development authorities, urban planners, and transit operators:

- "Ridesharing works best with corporate support, although it is not necessary that employers operate their own programs; they should be encouraged to offer donations of cash and in-kind services to support ridesharing for the good of the community, not for ridesharing's sake.
- "Personnel departments should be encouraged to consider ridesharing services as employee benefits that are more cost effective than most.
- "Economic development entities should be encouraged to view ridesharing in terms of the many benefits it offers industry and business, as well as the community.
- "New developers creating traffic attractors should be required to develop ridesharing and transit plans. Cost of preparation could be tax creditable.
- "Planners should be urged to consider ridesharing as a primary alternative to building highways and parking garages, and as a major component of public transportation and land use planning.
- "Transit operators need to understand the value and necessity of including ridesharing in their operations to provide cost-effective, balanced transit."

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[27] Energy Tax Act of 1978, 92 Stat 3193, 26 USC 46.

Appendix

Publications

How Ridesharing Can Help Your Company: A Manual for Employers, 1980. U.S. Department of Transportation, Washington, D.C. 20590

Vanpooling for Profit: A Business Opportunity, Linda Shuck and Barry Welsh, 1982. Alliance to Save Energy, 1925 K Street N.W., Suite 507, Washington, D.C. 20006

Vanpooling: An Update, Lew Pratsch, 1979. U.S. Department of Energy, U.S. Supt. of Documents, Washington, D.C. 20402

Resources

National Ridesharing Information Center
Room 4432
Federal Highway Administration
Washington, D. C. 20590
(202) 426-2943
(800) 424-9184 Toll Free

National Association of Van Pool Operators
12208 W. Kingsgate Drive
Knoxville, Tennessee 37922
(615) 966-4507

Research Bulletin

Executive Incentives: Long-Term Performance Share/Unit Plans

by Harland Fox
Senior Research Associate

The Conference Board

umber 132

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Until a decade ago, a rational operating assumption of senior corporate executives was that a good, steady increase in company earnings would be accompanied by a good, steady increase in the price of the company's stock. Therefore, the stock option was an effective way to reward top executives for the long-term performance of the company.

But this basic assumption on which stock options were based collapsed during the 1970's. In many companies there was a good, steady increase in earnings but company stock prices remained static or declined. Stock options became worthless at worst and, at best, did not seem to reflect company performance properly.

Early in the 1970's, a few companies installed a plan for top executives that was designed to correct this situation. In place of stock options, senior executives were contingently given a specified number of shares of company stock. At the same time, long-term performance goals were set, usually in terms of earnings per share growth over a period of the next three to five years. Depending on how close to the performance targets they came, participating executives received all, some or none of the shares at the end of the performance period. This device is now commonly known as a "long-term performance *share* plan."

There is, however, an underlying difficulty with these plans in which shares of stock are the award unit: The value of a share may increase or decrease appreciably over the three- to five-year company performance period. If the stock price falls, the final value of awards will be less than planned, even if the corporate performance targets are met or exceeded. On the other hand, if the price of stock increases appreciably, participating executives will receive a windfall even if they meet only the minimum company performance goals.

Perhaps more important, the initial market value of a stock award, as well as any appreciation over the performance period, is a charge to company earnings. Therefore, companies face an open-end cost for the plan. One solution to the possibility of stock price appreciation is to put a cap on the appreciation allowed for plan computations. For example, among the 27 performance share plans described here, 15 set a maximum on the allowed increase in the value of a share over the market price at the time of the contingent award. An increase of 200 percent (six plans) and 300 percent (four plans) are most common; the other five plans set a cap of 120, 140, 175, 180, and 250 percent, respectively.

A more general solution to the problem of an award unit whose value might vary over the course of the performance period was the adoption of what are now generally labeled, "long-term performance *unit* plans." Under these plans, the contingent award at the beginning of a performance period is made in units with a *fixed value* that does not change during the performance period. Thus, the only thing that determines the final value of an award is how close plan participants come to performance targets. To put this another way, an important result of adopting the *unit* plan is to completely sever the size of the payout from the performance of company stock over the relevant period. Under the performance *share* plan, the value of the payout is at least partially affected by the price of company stock.

The performance *unit* plan is by far the most common arrangement at present. For example, among the 89 plans analyzed here, 59 (two-thirds) are performance *unit* plans, 27 are performance *share* plans, and the rest make awards partially in shares and partially in units. In one of the three plans in which both shares and units are awarded, the combination is essentially a function of the company performance measure used. The performance measure is a comparison of the company's profitability and earnings growth with that of ten competitors. If the company meets its goals relative to competition, executives are assured of one-half of the value of the initial award through the performance *units*. However, if the price of company stock falls during the performance period, the share unit values drop and the executives are penalized along with the stockholders. In the other two companies that grant both shares and units, the units are essentially an *added* grant to pay the tax on a restricted stock award.

Growth of Plans

The first long-term performance share/unit plans were adopted by about a dozen major companies in 1971 and 1972.[1] By the Spring of 1974, about 8 percent of the manufacturers among the *Fortune* 1,000 industrials had a plan; this had increased to approximately 32 percent by the Spring of 1982.[2],[3] The growth rate was much higher among larger manufacturers, however. By 1982, approximately 51 percent of those with sales of $2 billion or more had a plan compared with 31 percent of those with sales of $400 million to $2 billion, and 16 percent of those with sales of $100 million to $400 million.[4]

The growth of these plans has not been as great in nonmanufacturing industries. For example, in the Spring of 1982, 13 to 17 percent of a sample of retailers, commercial banks, insurance companies, and construction firms had a plan.[5]

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[1] Laurence C. Bickford, "Long-term Incentives for Management, Part 6; Performance Attainment Plans," *Compensation Review*. Third Quarter, 1981, p. 18.

[2] Harland Fox, *Top Executive Compensation (1974 Edition)*. The Conference Board, Report No. 640, 1974, p. 10.

[3] *Top Executive Compensation (1982 Edition)*. The Conference Board, Report No. 793, 1980, p. 14.

[4] *Top Executive Compensation (1982 Edition)*, Ibid.

Relationship to Nonqualified Stock Options[6]

As already noted, in the early development of long-term performance share/unit plans, awards were considered a substitute for stock option awards. A sizable minority of companies still continue this practice: In 37 percent (33) of the 89 plans studied here, participants in the performance share/unit plan do not receive stock options. Most (23) of these companies dropped their stock option plan when the performance plan was adopted. The other ten companies have a nonqualified stock option plan, but do not grant options to participants in the performance share/unit plan. This practice of no nonqualified stock options for performance plan participants is much more common among performance *share* plans than among performance *unit* plans.

- Among the 30 performance *share* plans, 63 percent (19) do not grant nonqualified stock options to plan participants.[7] That is, twelve have no stock option plan; seven have a plan but do not grant options to performance share plan participants.
- Among the 59 performance unit plans, only 24 percent (14) do not grant stock options to plan participants. Eleven companies have no stock option plan; the other three have a plan but do not grant options to performance unit plan participants.

Another small group of 12 performance *unit* plans use the "tandem" device to prevent participants from simultaneously benefiting from performance unit awards and stock option grants. In these companies, nonqualified options are granted "in tandem" with performance units; the exercise or payment of one cancels the right to the other. For example, in one company, performance units equal in total value to stock options are granted; at the end of the performance period, the participant receives either the units or the options, whichever are most valuable.

In the remaining 49 percent (44) of the companies, participants in the performance share/unit plan also receive nonqualified stock options. However, in more than half (23) of these plans, the company indicates that "the size of the stock option grants is smaller than would be the case if performance awards had not been granted."

Who Participates

In most companies, participation in the performance share/unit plan is limited to a relatively small group of senior executives. One reason for this limited eligibility is the nature of the performance goals specified by the plans; only the very top executives could be expected to have an obvious impact on corporate financial performance over a three- to five-year period.

Probably more important is the cost of the plan. Payments made under these plans are a compensation expense, a charge against earnings. The cost factor is further highlighted because the other major long-term incentive is the stock option for which there is no compensation expense (unless stock appreciation rights are granted).

Among the 89 plans studied here, the median number of participants is 40, with the middle half of the plans ranging between 20 and 73 participants.

The tabulation below shows the general distribution of participants in the plans.

Number of Participants	*Plans*	
	Number	*Percent*
Less than 20	20	22%
20 - 29.	12	13
30 - 39.	12	13
40 - 59.	12	13
60 - 99.	15	17
100 - 199.	9	11
200 and over. . . .	9	11
Total.	89	100%

The number of participants tends to increase with company size. For example, among the companies with fewer than 10,000 employees, the median number of participants is 22 executives, with the middle half ranging between 17 and 41. But, for the companies with 10,000 or more employees, the median number of participants is 58, with the middle half of plans reporting 26 to 106 participants.

The executives covered by the plans are relatively highly paid, of course. For example, the median salary of the *lowest paid* participant is $62,000, with the middle half ranging between $50,000 and $81,000. Among the companies with fewer than 30,000 employees, the median is $56,000, with the middle half from $40,000 to $66,000. But the median is $75,000 in companies with 30,000 or more employees, with the middle half ranging from $56,000 to $100,000.

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[5] *Top Executive Compensation (1982 Edition)*, p. 6.

[6] Information for this report was obtained before the general adoption of the new "incentive stock options," which first became effective in August, 1981. These new stock options have no particular characteristic that would be likely to change the relationships to stock options noted here.

[7] This includes the three plans that grant *both* shares and units.

The executive group covered by these plans is a relatively small proportion of the total *exempt* population in the company. For example, in about half (44) of the 89 companies, participants represent less than 1 percent of all exempt employees. In most (34) of the other plans, they represent 1 percent to 5 percent of the exempt population. Only 11 plans include 5 percent or more of the exempt group.

All but six of the companies have an *annual* bonus or incentive plan that also covers executives in the performance share/unit plan. Coverage in the long-term plan is much more restricted, however. On the average, only the top 21 percent of the bonus group is eligible for long-term performance awards; the middle half of the companies cover from 10 percent to 38 percent of the annual bonus eligibles.

Similarly, among the 56 companies in which performance share/unit plan participants also are eligible for stock options, these participants are a much smaller group than the stock option eligibles. On the average, only the top 22 percent of the stock option group is eligible for the long-term performance awards. However, almost 31 percent of plans cover essentially the same group as the stock option; about half of these plans grant performance awards in tandem with stock options.

The Performance Period

A key feature of the long-term performance plan is, by definition, the "performance period"—that is, the number of years over which corporate performance will be measured to determine the amount of award payout.

As Table 1 indicates, the performance period is three or four years or, somewhat less commonly, five years. Certainly the choice of the length of the performance period depends basically on the ability to quantify and forecast business performance over the period. At the same time, a performance period of less than three years is apparently too short a focus to be considered long term; the plan might then be viewed as a variation on the annual bonus plan. Similarly, if the performance period is too long (apparently more than five years), the plan may lose its incentive impact because of the wide gap between reward and performance.

Ten of the plans have changed the length of the performance period since the plan's inception. Six of them have shortened the length of the performance period: from five years to three years (three plans); from five to four years (two plans); and, in one plan, from nine to three years. The other four plans have extended the performance period: to three years from two; to four years from three; to four years from two; and to five years from three years.

As a general rule, the companies do not give a contingent award at the beginning of the performance period and then wait until the performance period ends before starting a new performance period (that is, before making another award). As Table 1 indicates, only eight plans do this. The other 81 plans have overlapping performance periods. The most common arrangement (30 plans) is to start a new three-year performance period each year by using annual awards. Other plans also use annual awards but the performance period is either four (ten plans) or five years (eleven plans). Another thirty plans start a new performance period every two years; in most cases (twenty plans), the performance period is four years.

Table 1: The Performance Period and Frequency of Grants

Frequency of Grants	*Total Plans*		*The Performance Period*		
	Number	*Percent*	*3 years*	*4 years*	*5 years*
Annual	51	57%	30	10	11
Every 2 years	30	34	4	20	6
Every 3 years	3	3	3	—	—
Every 4 years	3	3	—	3	—
Every 5 years	2	2	—	—	2
Total	89	100%[a]	37(42%)	33(37%)	19(21%)

[a] Details do not add to 100 because of rounding.

The primary purpose of overlapping performance periods is to prevent one bad year early in the period from erasing the possibility of reward over the remaining years of the period; overlapping performance periods recreate incentive periodically. By the same token, it is obvious that one disastrous year can affect more than one overlapping performance period.

By starting a new performance period every one or two years, the company also has the opportunity to set new performance targets periodically. In addition, newly eligible executives can be added to the program more frequently (or poor performers dropped). Overlapping performance periods also may help to retain executives; portions of one or more awards are always outstanding and forfeitable.

Corporate Performance Standards

The coupling of financial rewards for participants to some measure of corporate long-term financial performance is the very essence of these performance share/unit plans. Corporate financial performance is evaluated by two basic types of standards.

In 25 percent (22) of the plans, the performance standard is *external*, based on company performance *relative* to some other group of companies. For example, here is the way one of these plans defines the performance standard:

> "One hundred percent of the contingent cash value of the performance units shall be earned if the company's cumulative EPS (earnings per share) growth rate for the performance period is at least at the 75th percentile of the cumulative EPS growth rates for the comparison corporations for such performance period. Fifty percent of such contingent cash value shall be earned if such cumulative EPS growth rate of the company is at the 50th percentile for the comparison corporations. If the company's percentile rank is between the 50th and 75th percentiles for the comparison corporations, a pro rata portion between 50 and 100 percent of such contingent cash value shall be earned.
>
> "No amount shall be earned at the end of a performance period with respect to any performance unit if (1) the company's cumulative EPS growth rate for such performance periods is below the 50th percentile of the cumulative EPS growth rates for the comparison corporations; and (2) the company does not achieve at least the average return on shareholders' equity designated by the committee at the time the performance period is established."

In addition to measuring company performance relative to the performance of a group of peers, the company above also uses an *internal* yardstick. That is, the company must achieve a specified return on stockholders' equity no matter how well it does relative to the comparison group (four other plans have this dual yardstick arrangement).

In three-fourths (67) of the plans *only* an internal standard is used to evaluate company performance. For example, a typical internal target might be:

> "No payment under this program will be made if company performance falls below a level of 7 percent compounded annual earnings per common share during the performance period. Compound growth rate for the performance period shall be computed using as a base the earnings per common share for the fiscal year immediately preceding the performance period."

As a rule, earnings per share is the most common standard by which corporate performance is judged. As the tabulation below illustrates, 79 percent (70) of the plans use EPS, either as the sole standard (55 plans) or in conjunction with other measures (15 plans).

Among the 34 plans that use some other measure of corporate performance than EPS, the most common are return on stockholders' equity (12 plans) and return on total capital (12 plans). Return on assets (four plans), change in absolute profits (four plans), and increases in book value (two plans) are also used.

In those plans that use EPS growth, the targets are typically expressed in terms of a cumulative compound growth rate. For example, if the EPS for the base period is $1.00 per share and the target is 10 percent compound growth over a three-year performance period, total earnings of $3.64 per share would be needed ($1.10 + $1.21 + $1.33). To meet the target, however, the earnings could be produced in any pattern; for example, $1.33 + $1.21 + $1.10.

As a rule, EPS targets consist of a range; that is, there is a minimum growth rate below which no payments are made; a normal or par; a maximum target payoff. Table 2 shows these EPS targets for 36 of the 50 plans that use EPS to define an *internal* performance standard. For par performance the median is 12.5 percent annual cumulative earnings increase. The median minimum target is 8 percent, and the median maximum target is 15 percent.

The base from which the EPS target is calculated usually is earnings in the year just prior to the performance period: 24 of 44 of the above plans use this base. Another eleven use the average of the two prior years, seven use the three prior years, and two use an average of the four years prior to the performance period.

Size of the Initial Award

As a rule, the value of the awards at the beginning of a performance period are the measure of the expected payoff if the participant group hits the *par* company performance target; the minimum and maximum payments are generally set as a function of the initial award.

	Total Plans		*Internal Standard*		*Relative Standard*	
Performance Measure	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
Only earnings per share . . .	55	62%	44	66%	11	50%
Earnings per share *plus* other measure	15	17	6	9	9	41
Not earnings per share; only other measures	19	21	17	25	2	9
Total	89	100%	67	100%	22	100%

Table 2: EPS Growth Rate Targets, 36 plans

Compound Annual Increase in EPS	*For Minimum Payment*	*For Par Payment*	*For Maximum Payment*
25%	—	—	1%
20	—	1%	4
19	—	—	1
18	—	—	2
17	—	—	3
16	—	—	3
15	2%	9	4
14	—	3	3
13-13.9	—	4	2
12-12.9	3	7	5
11	2	2	1
10	5	4	5
9	2	1	—
8-8.9	6	3	1
7-7.9	6	1	—
6	6	—	—
5	2	1	1
4	1	—	—
3.5	1	—	—
Median	8%	12.5%	15%

Companies were asked to indicate the value of initial awards as a multiple of base salary for the highest paid, the lowest paid, and the "average" paid participant for the most recent award year (usually 1980 or 1981). For the 209 executives for whom data were obtained from 71 companies, the median value of the intial award was the equivalent of 55 percent of base salary, with the middle half of the awards ranging between 35 percent and 100 percent of salary. As might be expected, the median award of 77 percent of salary for the highest paid recipient (typically the chief executive officer) is significantly higher than the median award for the average (50 percent of salary) and the lowest paid recipient (40 percent).

The size of the award depends on the frequency with which grants are made. As a comparison of Tables 3 and 4 indicates, the median grant for those plans that start a new performance period every two years is almost twice as large as the median grant for the plans that make annual grants. For example, for the chief executive officers (highest paid), the median grant for plans with annual grants is 60 percent of salary, compared with 100 percent of salary under plans with biennial grants.

The size of the initial award is also related to the length of the performance period. For example, the median award for the highest paid recipients in plans with *annual* grants and a three-year performance period (56 percent of the plans in Table 3) is 50 percent of pay compared with 150 percent of pay for highest paid recipients in plans with *biennial* grants and a *four*-year performance period (67 percent of the plans in Table 4). It is assumed here that this difference is mostly due to the difference in frequency of grant; among the plans with annual grants, the median award of 60 percent of pay in eighteen plans with a four- or five-year performance period is only slightly higher than the 50 percent median in the twenty-three plans with annual grants and a *three*-year performance period. (There were not enough biennial grant plans with five-year performance periods to compare with the four-year performance period plans.)

The size of the initial award as a percentage of salary also is related to salary level, as the tabulation below suggests.

Although the number of cases is small, biennial grants tend to be almost twice as large as annual grants at each salary level.

Value of Final Payouts

In addition to information about the value of awards at the beginning of the performance period, companies were asked to indicate, for the most recent year in which awards have actually been paid, the value of the award (as a multiple of base salary) for the highest paid recipient, the lowest paid, and the "average" paid recipient.

For the 103 executives for whom data were obtained from 35 companies, the median value of payments was the equivalent of 43 percent of base salary, with the middle half ranging between 19 percent and 81 percent of base salary.[a] This can be compared with payments reported for the five highest paid executives in 58 companies that made payments during 1979 and in 81 companies that made payments during 1981. In one study, the median for 265 executives was the equivalent

	Annual Grants		*Biennial Grants*	
Salary Level	*Executives*	*Median Award*	*Executives*	*Median Award*
$300,000 and over . . .	21	69%	14	135%
200,000-299,999 . . .	14	55	7	90
100,000-199,999 . . .	28	40	25	69
Less than $100,000 . .	55	30%	33	59%

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[a] In most of the other 54 companies no performance period has yet matured.

Table 3: Size of Initial Awards for Plans with Annual Grants

Size of Initial Award Percent of Salary	*Highest Paid Recipient*		*Average Paid Recipient*		*Lowest Paid Recipient*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
175-200%	1	2%	—	—	—	—
150-174	1	2	—	—	—	—
125-149	2	5	1	3%	—	—
100-124	5	12	—	—	1	2%
75-99	4	10	5	14	2	5
50-74	15	37	7	19	9	22
25-49	10	25	18	50	12	29
Less than 25%....	3	7	5	14	17	42
Total	41	100%	36	100%	41	100%
Median Award	60%		36%		30%	
Mid-50% Range	46-84%		29-60%		17-53%	
Median Salary	$300,000		$96,000		$62,000	
Mid-50% Range	$249,000-$355,000		$80,000-$112,000		$53,000-$74,000	

Table 4: Size of Initial Awards for Plans with Biennial Grants

Size of Initial Award Percent of Salary	*Highest Paid Recipient*		*Average Paid Recipient*		*Lowest Paid Recipient*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*
300% and over....	2	7%	—	—	—	—
200-299	4	15	1	4%	—	—
150-199	4	15	6	23	2	7%
125-149	2	7	—	—	2	7
100-124	4	15	2	8	3	12
75-79	5	19	2	8	2	7
50-74	5	19	11	41	9	33
25-49	1	3	3	12	5	19
Less than 25%....	—	—	1	4	4	15
Total	27	100%	26	100%	27	100%
Median Award	100%		70%		56%	
Mid-50% Range	80-190%		50-150%		35-100%	
Median Salary	$300,000		$100,000		$60,000	
Mid-50% Range	$190,000-$375,000		$75,000-$120,000		$43,000-$85,000	

of 34 percent of 1979 salary, with the middle half ranging between 17 percent and 63 percent of salary.[9] In the other case the median payment for 392 executives was 39 percent of 1981 salary with the middle 50 percent ranging between 20 and 70 percent of salary.[10]

The value of payments is related to the frequency of grants. That is, in those plans in which there will be a payment every year (assuming the performance targets are met each year), the median award for 59 executives is 25 percent of base pay, with the middle half ranging between 11 percent and 60 percent. The median is 60 percent, with a mid-50 percent range of 36 percent to 105 percent of base pay for the 39 executives who received payments from a plan in which a performance period ends every two years. (Again, the length of the performance period probably has an influence on the size of payments, but data are not adequate to explore this).

As Table 5 suggests, the median size of payments as a percent of salary tends to increase as salary increases. This is true for plans with annual awards and for plans with biennial awards, but data are not adequate to measure the magnitude of these differences.

Table 5: Amount of Payouts

Amount of Payout Percent of Base Salary	*Highest Paid Recipient*		*Average Paid Recipient*		*Lowest Paid Recipient*		*Total Recipients*
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*
150% and over	6	17%	2	6%	—	—	8
100-149	5	14	3	9	4	11%	12
90-99	—	—	—	—	1	3	1
80-89	4	11	1	3	—	—	5
70-79	—	—	2	6	1	3	3
60-69	4	11	5	15	3	9	12
50-59	1	3	1	3	2	6	4
40-49	4	11	3	9	2	6	9
30-39	2	6	7	21	4	11	13
20-29	5	14	1	3	5	14	11
10-19	2	6	6	18	6	17	14
Less than 10%	2	6	2	6	7	20	11
Total	35	100%[a]	33	100%[a]	35	100%[a]	103
Median Payment	62%		40%		28%		43%
Mid-50% Range	25-102%		20-70%		10-60%		19-81%
Median Salary	$300,000		$102,000		$60,000		$110,000
Mid-50% Range	$250,000-$375,000		$77,000-$130,000		$50,000-$82,000		$66,000-$225,000

[a] Details do not add to 100 because of rounding.

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[9] *Top Executive Compensation (1980 Edition).* The Conference Board, Report No. 793, 1980, p. 5.

[10] *Top Executive Compensation (1981 Edition).* The Conference Board, Report No. 827, 1982, p. 6.

About the Companies

In the Spring of 1980, The Conference Board obtained information from approximately 1,200 companies about their executive compensation programs, including the presence of a long-term performance share/unit plan.[1] These 1,200 companies included a sample of:

- manufacturers from the *Fortune* 1,000 industrials,
- commercial banks from those with $100 million or more in total deposits,
- insurance companies from those with $10 million or more in premium income,
- retailers from those with 1,000 or more employees,
- construction companies from among the 400 largest.

In late 1981, all companies in the above groups that had a performance share/unit plan were asked to participate in this study. The total number with a plan and the number that provided data are shown below:

Type of Business	*Total With Plan*	*Participants Number*	*Participants Percent*
Manufacturing	121	70	58%
Commercial banks	22	8	36
Insurance	14	6	43
Retail	10	3	30
Construction	6	2	33
Total	173	89	51%

The size of the 89 companies that provided data is summarized below in terms of the total number of U.S. employees.

Number of U.S. Employees	*Total Companies*	*Manufacturers*	*Nonmanufacturers*
60,000 and over	13	10	3
50,000-59,999	7	7	—
40,000-49,999	8	8	—
30,000-39,999	6	5	1
20,000-29,999	12	11	1
10,000-19,999	12	8	4
5,000-9,999	11	10	1
Less than 5,000	20	11	9
Total	89	70	19

For the group as a whole, median U.S. employment is 23,000, with the middle 50 percent ranging between 6,600 and 44,000. The manufacturers are considerably larger than the nonmanufacturers. The median manufacturer employs 23,000 compared with 6,200 for nonmanufacturers.

A partial list of participating companies is shown below; 12 companies preferred not to be identified.

Air Products and Chemicals, Inc.
Akzona Incorporated
Albany International
Atlantic Richfield Company
Bandag, Incorporated
Bank of America
Bemis Company, Inc.
Black and Decker Manufacturing Co.
Block Drug Company, Inc.
Boise Cascade Corporation
Borden Inc.
Bristol-Myers Company
Burlington Industries, Inc.
Carlisle Corporation
Champion International Corporation
Connecticut Mutual Life Insurance Company
Continental Group, Inc.
Control Data Corporation
Corning Glass Works
Crown Zellerbach
Emerson Electric Company
Esmark, Inc.
Esterline Corporation
Federal Paper Board Company, Inc.
Fidelity Union Bancorporation
Fieldcrest Mills, Inc.
First American Bank of Nashville, N.A.
First Interstate Bancorp
FMC Corporation
Gannett Company, Inc.
GEICO
General Electric Company
General Mills, Inc.
H. J. Heinz Company
Honeywell Inc.
Horizon Bancorp
International Harvester
International Minerals & Chemical Corporation
ITT
Life Insurance Company of North America
LTV Corporation
McGraw-Hill, Inc.
3M Company
Mobil Oil Corporation
Monsanto Company
Nalco Chemical Company

Nashua Corporation
National Old Line Insurance Company
National Steel Corporation
National Tea Company
N.L. Industries, Inc.
Owens-Illinois, Inc.
J. C. Penney Company, Inc.
Perini Corporation
Philips Petroleum Company
Pillsbury Company
PPG Industries, Inc.
Quaker Oats Company
Ranco Incorporated
Raymond International Inc.
R. J. Reynolds Industries, Inc.
Sanders Associates, Inc.
Scientific-Atlanta, Inc.
Sealed Power Corporation
Sears, Roebuck and Company
Shell Oil Company
Standard Oil Company of California
Texas Instruments
Thiokol Corporation
Union Oil Company of California
U.S. Bancorp
U.S. Industries, Inc.
U.S. Trust
United Technologies Corporation
Westinghouse Electric Corporation
Xerox Corporation
Zions First National Bank

[1] Harland Fox, *Top Executive Compensation, 1980 Edition*. The Conference Board, Report No. 793, 1980, p. 5.

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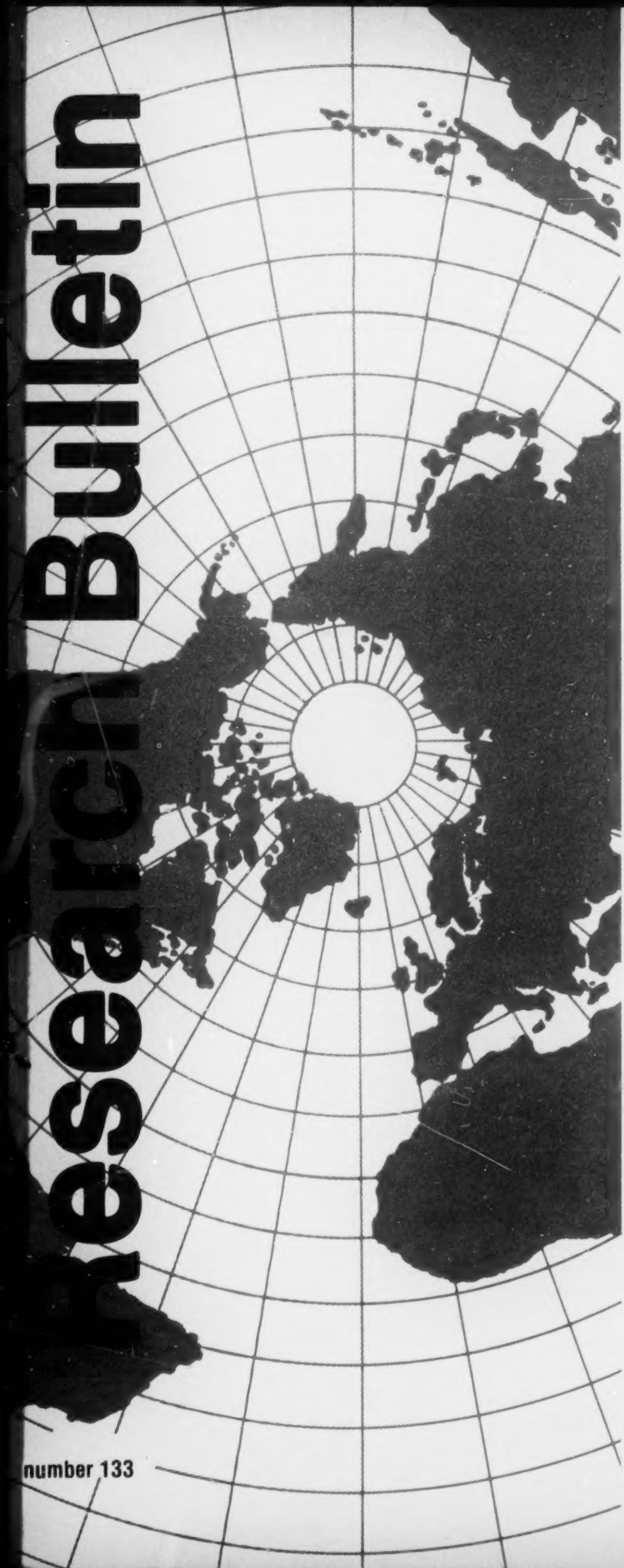
Research Bulletin



An Appraisal of International Saving Rates

by Vincent G. Massaro

Senior Economist
Office of the Chief Economist

The Conference Board

number 133

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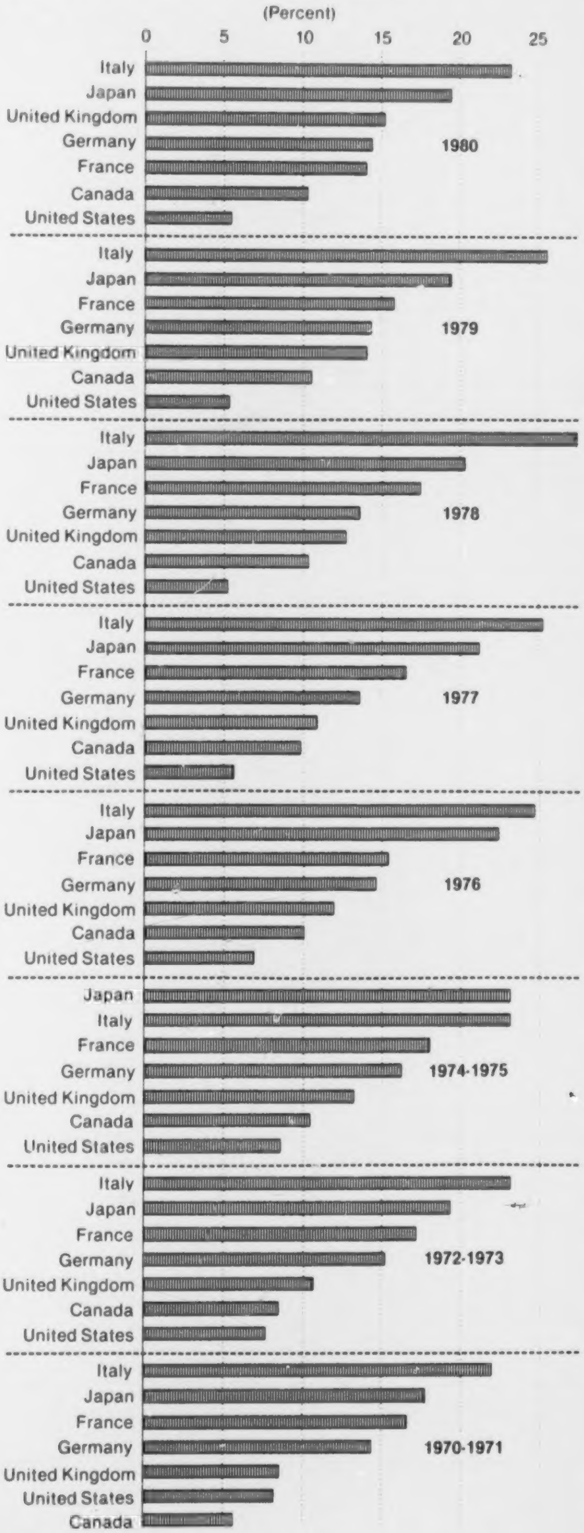
IN COMPARISONS of the economic performance of the major industrial countries of the Organization for Economic Cooperation and Development (OECD), a striking finding is the apparently high proportion of U.S. output (income) that goes to consumption, and the low proportion that goes to saving and investment.[1] According to numerous studies and statements by policymakers, current saving in the United States is not only low in comparison to other countries; within the United States itself, the saving rate is lower now than it was earlier. (See Chart l.)

Two important conclusions, both with policy implications, are often drawn from these comparisons. First, it is argued that lower saving results in lower rates of growth of capital formation—which, in turn, lead to lower rates of growth for the economy. The policy implication, therefore, is to favor those specific measures that encourage greater saving.

Lower saving also has policy implications for federal deficits. In recent years, the point has frequently been made that, despite the substantial size of U.S. budget deficits measured in billions of dollars, these deficits are relatively small as percentages of the nation's GNP when compared with those of other major countries. Indeed, average annual government deficits in the United States as percentages of GNP have been among the lowest of seven major industrial countries over the five-year period 1978-1982 (Chart 2). However, if saving in the United States is low compared to other countries, and if it is the relationship between countries' deficits and savings that is critical, financing the relatively smaller U.S. deficits (i.e., smaller as a percentage of GNP) may lead to greater pressures on financial markets in the United States.[2] Federal Reserve Board Chairman Volcker has pointed out that U.S. government financing of the budget deficit and off-budget activities accounted for approximately $80 billion (or more than 43 percent) of the $185 billion in net saving in the economy.[3] The lower U.S. deficit, therefore, must still be viewed with concern; only 57 percent of net saving in the United States is available for new capital formation and other private demands.

The present study assesses the apparently wide acceptance of the view that saving in the United States has indeed been low—and declining—and it attempts to place saving rates among countries on a more comparable

Chart 1: Saving Rates Among Countries [1)]



1) Ratio of personal saving to disposable income
Source: Bank for International Settlements

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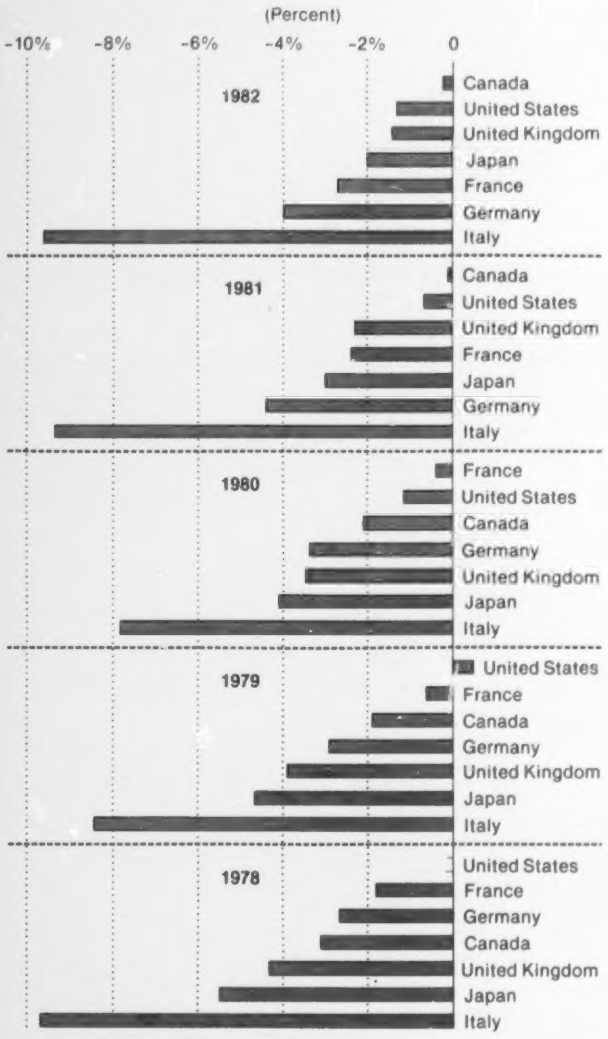
[1] Albert T. Sommers, *Testimony before the Joint Economic Committee, on the 1981 Economic Report of the President: Congress of the United States, (First Session) Washington, D.C.*, February 11, 1981. "And we are distinguished from the rest of the world by an investment rate and a productivity experience that have been relatively poor for many years."

[2] Paul McCracken, "Economic Policy in the U.S.: Chapter Two," *Wall Street Journal*, August 27, 1981.

[3] Remarks by Paul A. Volcker, Caperton Lecture, Owens Graduate School of Management, Vanderbilt University, Nashville, Tennessee, October 15, 1981.

Chart 2: Government Deficits or Surpluses[1]



1) As percentage of GNP/GDP.
Source: OECD

statistical basis. It also examines various measures of saving for the major industrial countries, and seeks to identify the main conclusions that can be drawn once statistical adjustments for comparability of figures are made.

The following major conclusions emerge from the study:

- The ranking of countries varies according to the concepts and measures of saving adopted, and the United States is by no means at the bottom of the list for all of the measures used.
- Saving rates in the United States are not lower than in earlier years, according to several measures used.
- Generally, saving rates do not vary substantially from one year to another, regardless of the measures used and the country chosen.
- One major instance in which measures of *net national saving* do show sharp annual variations was the relatively sharp decline in the ratio of net national saving to national disposable income that nearly all major industrial countries experienced in 1974 and 1975, associated with substantially higher prices of energy and the worldwide recession of that period.
- While a number of measures of saving substantially reduce the gap between Japan and other countries, Japan remains at the top of the list for all but a few measures of saving. Depending on the period of time chosen, Italy is the highest ranking country according to certain measures of private and household saving.

Saving and Investment

This study accepts the conventional concepts of saving and investment in which actual (or "realized") saving is, by definition, equal to actual (or "realized") investment, though intended saving and intended investment will normally differ. This approach became widely accepted largely due to the approach of John Maynard Keynes in his *General Theory of Employment, Interest and Money* (1936). (In his earlier *Treatise on Money,* Keynes used a different approach in which saving was, by definition, not equal to investment, and in which an excess of investment over saving meant that firms were increasing their net assets or, when saving exceeded investment, were incurring losses.)

The value of the total output of an economy is equal to the value of its total income. Total income can be divided into two major components—one of which is spent or consumed, and the second of which is saved. In like manner, total output can be divided into two major components—consumption goods and investment goods. The latter includes not only new fixed investment but also additions to stocks or inventories (which are often critical "swing" factors during business cycles).

The dividing lines drawn between output for consumption and investment are arbitrary because judgments differ as to what should be included in each category. But, once these lines are drawn for output, they are reflected on the income side in such a way that saving will equal investment. If, for instance, one country were to treat consumer durables as part of consumption while a second country were to include it under investment, the saving ratio in the second country could, on this reporting basis alone, tend to be higher. Alternatively, if consumer durables were more important in one country than in another, and if both countries were to exclude durables from investment in their national income accounts, the saving ratio in the country in which durables were more important would appear to be lower, on this basis alone. Saving figures in national income accounts do, in fact, exclude consumer durables, and the relative importance of saving among countries is affected by this practice (see below).

The relation between budget deficits and saving of major industrial countries will also be examined below. In terms of the saving-investment identity, saving equals investment plus (or minus) the budget deficit (or surplus).[4]

Aside from these equalities, which are essentially matters of definition, there has been an intense debate as to whether saving governs investment or whether investment, for the most part, determines saving. There have been two broad approaches to this conundrum. The first is, essentially, the "blade of scissors" approach, in which saving and investment are viewed as largely inseparable, and both are seen as equally vital for economic growth.

The second approach, which itself has two variations, stresses the importance of either saving or investment, largely depending upon the time period under review and the conditions of the economy. Those who stress the primacy of saving usually emphasize a longer term period and abstract from the business cycle; or, under short-term conditions, they envision an economy that is close to full-employment conditions. According to this view, while there are some conditions under which saving does not become available for investment, new saving normally flows into forms in which it leads to greater investment.

Those who stress the primacy of investment, however, deal with cyclical conditions in which there are unemployed resources in the economy, and saving, under these conditions, is regarded as a withdrawal from the income stream. Even over longer periods, decisions by business to invest are seen as the main force that is driving the economic system—causing incomes to rise and, thereby, resulting in greater saving for the economy. In short, according to this position, if the investment opportunities exist, the saving that may be necessary to proceed with new projects will be found in one way or another. A large increase in saving will not normally do much to *cause* a substantial increase in investment. The policy implications, of course, are that measures to promote saving will not normally promote substantial increases in capital formation. Rather, according to this second position, attention should center on promoting measures that increase the inducement to invest.

Measure and Definition of Saving

The first important task in comparing saving and investment of various countries is to eliminate those differences in the figures that are due to definition and to "statistical mirage."[5]

Saving is defined as the excess of current receipts over current disbursements. Statistically, it is derived as a residual of these two much larger items; relatively small errors or revisions in either are, therefore, capable of causing—and in the past have caused—significant changes in reported saving.

There are two further distinctions that influence measures and definitions of saving. First, saving may be defined either gross or net of depreciation. Both conceptual and statistical difficulties cloud a uniform calculation of depreciation, but gross saving measures generally show much greater constancy over longer periods of time than do the measures of net saving. Second, the amount or level of saving should not be confused with the *rate* of saving. The need for greater saving and investment does not dictate that the rate of saving must be increased. This leap is often made in the literature, and it is particularly important not to confuse the two in drawing policy implications from saving measures.

It is misleading to refer to "the saving ratio" for an individual country, or to a country's "saving." For an individual country, there are at least three broad measures of saving: national saving, the broadest measure, which includes all sectors of the economy; private saving, which includes the personal and business sectors; and personal or household saving. The dividing lines between each major sector are matters of convention and differ among countries.

Definitions of saving in a given sector vary between different countries and may even vary within the same country. In the United States, for instance, "household saving" in the flow of fund accounts exceeds "household saving" in the national income and product accounts (NIPA), since durable goods are included as saving in the former. The differences are significant for gauging the relative importance of saving. For the year 1980, the net effect is to raise personal saving from $106 billion, according to NIPA, to $181 billion on a flow-of-funds basis; and, for 1981, personal saving rises from $130 billion to $205 billion.

Measures and definitions of saving for different sectors, as reported in each country's NIPA, do, in fact, differ from one another. These figures (Chart 1) show that the household saving rate in the United States (personal saving as a percentage of disposable personal income) is, by far, the lowest of the major industrial countries.

The ranking of countries according to each country's NIPA figures, however, is misleading in that these figures make no allowance for the different components of saving in each country, nor do they allow for differences in the specific ways in which the figures are calculated. The question arises, therefore, as to whether the differences among countries would be really as large if a set of standardized figures were to be used.

---

[4] This is easily seen by adding government expenditures and taxes to national income and output. Income then equals consumption plus saving plus taxes; output equals consumption plus investment plus government expenditures. Since income and output are the same, saving plus taxes equals investment plus government expenditures; or, saving equals investment plus the difference between government expenditures and taxes (i.e., the deficit).

[5] Sommers, February, 1981.

A set of more comparable figures is, in fact, available. In order to ensure that the figures for each major country are comparable statistically, the United Nations and the Organization for Economic Cooperation and Development (OECD) publish figures that conform to a standardized system of national accounts (SNA). These figures are provided in response to a special questionnaire, and have the advantage of making accessible to nonexperts an established time series of comparable data for many countries. The main disadvantage is that figures beyond 1979 are not yet available for many countries.

A First Approach to Comparability

According to the more comparable SNA figures, the saving rate of the United States is still the lowest of the major industrial countries when the saving rate is measured by the net national saving of each country as a percentage of its national disposable income. During the period 1975-1979, the saving rate of the United States averaged 5.5 percent annually, well below the 7.5 percent rate in the United Kingdom, the second lowest country. By contrast, the saving rate in Japan, the highest among the major industrial countries, averaged 22 percent annually, or four times the rate in the United States (see Table 1).

The annual average saving rate of the United States is lower for the period 1975-1979 than it was in the preceding five-year period, but the same is true of the saving rate of each of the other major industrial countries. A closer examination of the annual data for each country shows that, with one major exception, year-to-year changes were generally minor. Between 1973 and 1975, substantial declines in saving rates occurred in all major industrial countries. Only Canada went against the trend, temporarily, in 1974; but then, in 1975, its saving rate also plunged.

A second measure of national saving is the gross saving rate, that is, the gross saving of each country as a percentage of the country's GNP or GDP. According to this ratio, the average annual saving rate in the United States is no longer the lowest in all cases: It exceeded that of the United Kingdom during the periods 1960 to 1964 and 1975 to 1979. Throughout each period, this saving rate remained highest in Japan; but, during the period 1975 to 1979, the differences between Japan and the United States narrowed considerably from those shown by the net saving rate. (See Table 2.)

Table 1: Net National Saving Rates, 1960 to 1979

Year	United States	Japan	Germany	United Kingdom	Canada	France	Italy
1960-1964	9.0	n.a.	20.3[a]	9.2	10.8[a]	16.4[a]	17.6[a]
1965-1969	10.4	24.7	18.9	11.9	13.1	17.4	16.6
1970-1974	8.0	28.6	18.7	11.4	13.0	17.8	15.5
1975-1979	5.5	22.0	13.4	7.5	11.6	13.1	13.3
1973............	9.6	29.2	18.5	12.4	14.6	18.4	15.2
1974............	6.8	26.5	16.3	7.2	16.0	15.9	14.1
1975............	3.9	22.2	11.8	5.6	11.6	13.7	10.9

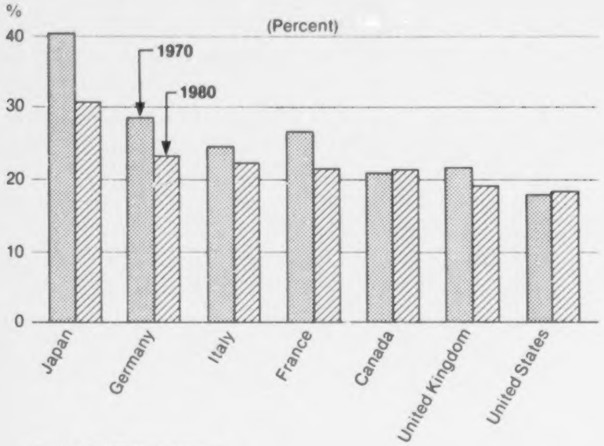
[a] Figures were not available for 1960 and 1961.
Source: United Nations; OECD; The Conference Board.

Table 2: Gross National Saving Rates, 1960 to 1979[a]

Year	United States	Japan	Germany	United Kingdom	Canada	France	Italy
1960-1964	19.2	33.6	27.7	17.8	20.3	24.4	25.1
1965-1969	20.0	34.5	26.6	19.2	22.9	25.4	23.4
1970-1974	19.0	38.4	26.8	19.8	22.3	25.7	22.6
1975-1979	18.7	32.0	22.8	18.2	20.9	22.8	22.0
1973............	20.7	39.2	26.6	21.1	23.5	26.0	22.4
1974............	19.3	36.3	25.1	16.9	24.8	24.5	21.9
1975............	17.5	32.2	21.6	15.4	21.1	23.0	20.1

[a] Gross saving as a percentage of Gross Domestic Product.
Source: OECD; The Conference Board.

Chart 3: Gross Saving Rates



Sources: OECD; United Nations.

There is also a much less pronounced decline in the ratio for the United States; and the ratios of other countries are also generally more stable over the entire period. The gross saving rate for the United States averaged 19.2 percent annually for the period 1960-1964 and 18.7 percent for the period 1975-1979—a decline of only 0.5 percent over the entire period.

A comparison of gross saving rates for the United States, Canada and Japan for the years 1970 and 1980 provides a picture that is the opposite of the general impression of many economists as to what has happened to saving in these countries. It shows that while the gross saving rates of the United States and Canada rose slightly, those of five major industrial countries fell, with the largest decline taking place in Japan, where the rate fell from slightly over 40 percent to less than 31 percent (see Chart 3).

According to the gross saving rate, the annual average of each major country is lower for the period 1975-1979 than it was for 1970-1974 (see Table 2). Moreover, most annual changes are generally minor, with a major exception taking place, once again, between 1973 and 1975. Each country experienced substantial declines in gross saving rates during that period, with the smallest declines taking place in Canada and Italy.

The widespread decline in both gross and net measures of national saving rates between 1973 and 1975 may well be traced to the worldwide recession and to the deterioration in the terms of trade of the major industrial countries that occurred with the quadrupling of oil prices in that period. The relatively small decline in Canada, whose terms of trade did not deteriorate as rapidly as those of the other countries, lends support to this interpretation.

A closer examination of the general decline in measures of national saving in this period shows that the decline was centered in the corporate and government sectors. Among the major countries, saving in the corporate sector rose only in Canada. Declines were relatively greatest in the corporate sector saving component of national saving for Japan, France and the United Kingdom. The largest declines in saving in the government sector took place in the United States, Canada and the Federal Republic of Germany.

Household saving—which, since 1960, has followed a general pattern of declining in recessions and rising during recoveries—rose over the 1973 to 1975 period of declining economic activity in all of the major industrial countries. One interpretation of this reversal of earlier experience is that saving took place largely for precautionary reasons in the household sector. The rises in household-sector saving were especially large for the United Kingdom and France.

Many studies of saving have centered on the saving of the household sector, and many of the widely used comparisons of saving ratios for countries have dealt solely with the household sector. While household saving constitutes the largest component of national saving, the behavior of national saving and its components during the 1973 to 1975 period highlights the dangers in relying solely on household saving as a proxy for changes in national saving.

There are, of course, other reasons for not relying solely on household saving either for purposes of international comparisons of saving or for accurately gauging trends in saving in individual countries. It would be misleading to view in isolation a rise in household or corporate saving that was due to a change in tax legislation, without also taking account of the effects of this action on saving in the government sector.

According to household-saving rates, the United Kingdom experienced the largest increase of all major countries between 1970 and 1980; and the United States and France experienced the largest decreases. Over the same period of time, household saving rates also rose in Japan and Italy, thus yielding a pattern for these four countries that is the opposite of that shown by their national saving rates.

National, Private and Household Saving

In addition to their gross and net national saving rates, countries are often ranked according to their household and private saving rates. These country rankings will vary according to the specific measure used and the year, or other time period, chosen.

There is a widespread view that Japan saves far more than all the other major countries, and that the Federal Republic of Germany is the country with the next highest saving rate. Although Japan has the highest average annual gross and net *national* saving rate for the period 1960-1979, it is not widely appreciated that Italy is the country with the highest gross and net *household* saving rate for the same period. The Federal Republic of

Germany has the third highest *net* household saving rate among major countries, but only the fourth highest *gross* household saving rate, behind Italy, Japan and France. The average annual net household saving rate for the United Kingdom exceeds that of the United States for the period 1970-1979, but the position is reversed for the longer period 1960-1979. For each period, the gross household saving rate of the United States is above the average of that of the United Kingdom.

The placement of countries according to their saving rates again changes if (net) private saving is the measure used as the basis for ranking. Japan, rather than Italy, once again has the highest rate; and the United Kingdom has the lowest annual average for the period 1970 to 1979. According to this same measure, Canada moves ahead of France and is no longer the country with the third lowest rate of saving, as it is according to measures of national and household saving.

There are two broad conclusions that emerge from examining these various measures of saving. First, the saving rate in Japan is either the highest or the second highest, regardless of the measure of saving chosen. Second, the United States and the United Kingdom consistently have the two lowest average annual rates of saving among the major industrial countries. The size of the differences in rates of saving among countries, however, varies considerably, depending on the measures used. (See Chart 4.)

Adjustments to Saving Figures

The saving figures published by the United Nations and the OECD represent one view of what can be classified as "saving." There are, however, numerous adjustments that can be made to the gross and net concepts of each of the three major categories of saving—national, private and personal. Indeed, for many purposes, a good case can be made that the adjusted figures are at least as accurate a representation of true saving as are the unadjusted figures. Two experts from the OECD have taken a major step toward clarifying different notions of saving by making a number of adjustments to saving figures for many of the major countries. (Unfortunately, the adjustments could not be made for the Federal Republic of Germany, because their figures do not include the information required to make these adjustments, such as the consumption of fixed capital for the household sector.) These adjustments allow the user to choose the figure that is most appropriate for the purpose at hand.[6]

One important adjustment shows what happens when consumer durables are included as investment, rather than as part of consumption. A second adjustment standardizes different country practices regarding direct and indirect (such as sales taxes and value-added taxes) taxation, and treats all taxes as direct taxes.

Several other adjustments, however, such as removing unincorporated enterprises from the household sector, affect the relation between household saving and that of other sectors but have no effect on national saving. Two

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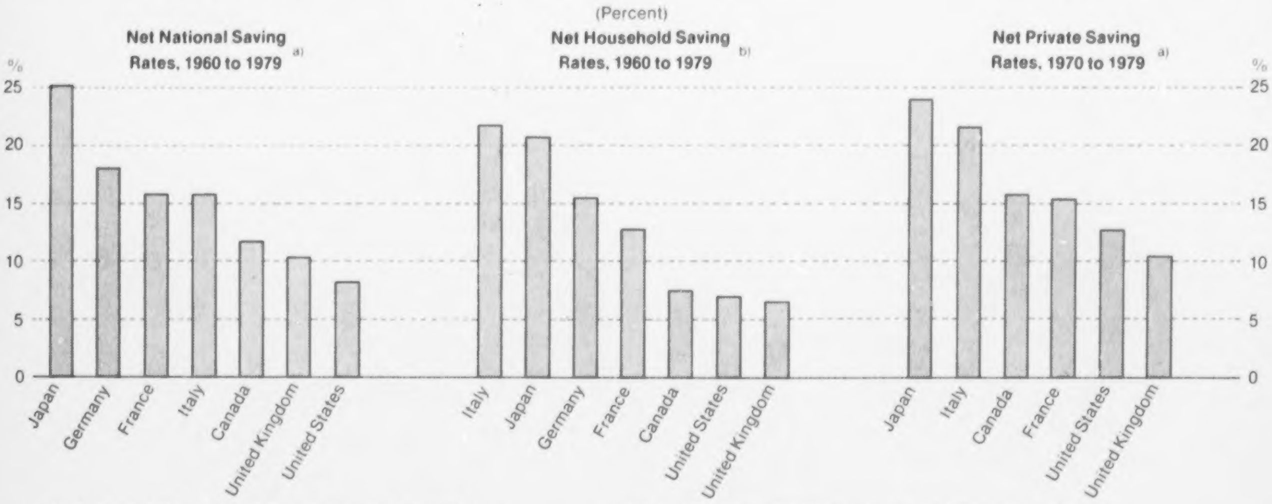
[6] Derek Blades and Peter Sturm, "The Concept and Measurement of Savings: The United States and Other Industrialized Countries," paper presented at the Federal Reserve Bank of Boston Conference on *U.S. Government Policies Affecting Saving: Predicted Impact and Lessons from Abroad,* Melvin Village New Hampshire, October 6-8, 1982.

Chart 4: Net Saving Rates

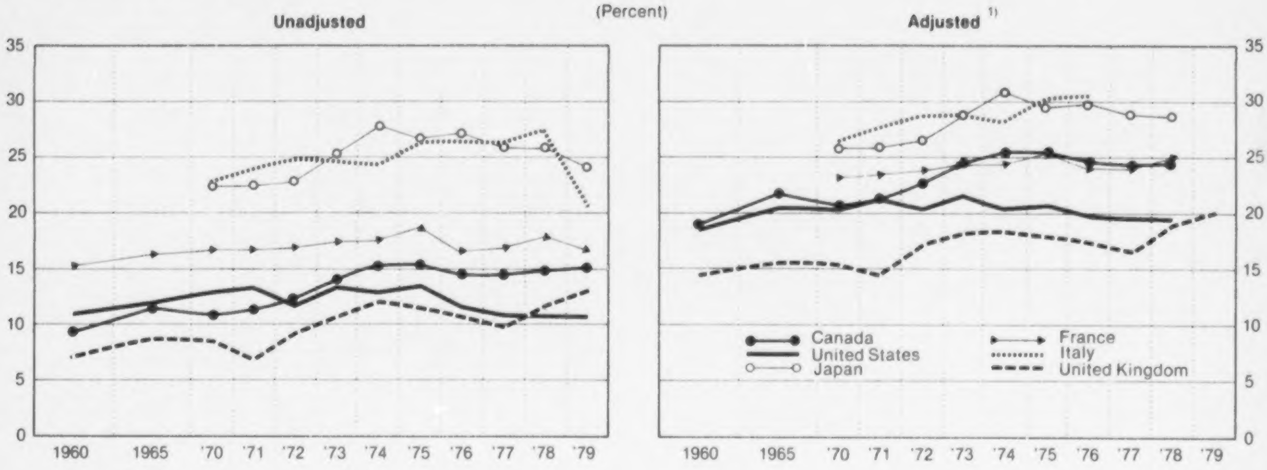


a)Data for Japan are for the period 1965 to 1979, and for Italy 1960 to 1980.

b)Data for Japan are for the period 1970 to 1979, and for Germany 1960 to 1978.

Source: The Conference Board, based on data from the OECD and the United Nations.

Chart 5: Household Saving Rates



1)Adjusted to include expenditures on consumer durables
Source: OECD

adjustments will be examined here in order to show the magnitude of their effects on countries' household saving ratios.

The first adjustment includes consumer durables as investment. The result of making this adjustment for the United States, the United Kingdom, and Japan are shown in Chart 5. There are two striking effects of this adjustment. First, for the period 1970 to 1978, the average gross household saving rate in Japan still exceeds the average annual rates in the United States and the United Kingdom by wide margins, but the extent of the margin falls from roughly 12.5 percent to less than 8 percent between rates in Japan and the United States. Second, the saving rate in the United States rises sharply and exceeds the rate in the United Kingdom, on average, for the period 1970 to 1979, and it is also higher than the rate in the United Kingdom in each year of the period 1970 to 1978.

A second adjustment shows the effects of standardizing the treatment of private pension transactions and changing the national income accounts so that household transactions with private pensions are treated the same as their transactions with social security systems. The saving rates in Japan, the United Kingdom, and the United States fall when this adjustment is made. The steepest fall in relative terms takes place in the United Kingdom so that the margin between the United States and the United Kingdom widens somewhat further. Since the rate in Japan falls least, the margin between Japan and the countries with lower saving rates widens further after this adjustment.

The combined effect of both adjustments shows that the household saving rate in the United States is higher than that in the United Kingdom, both on average over the period 1970 to 1978, and in each recent year.

The two adjustments made here strongly support the view that the specific measures chosen to represent even the same category of saving (e.g., household saving) make an important difference in international comparisons. Since the use of different, and equally defensible, measures of the same category of saving may yield different rankings (as shown by the comparisons of the United States and the United Kingdom), reliance on any single measure can easily be misleading in ranking countries according to their saving ratios. In making international comparisons, therefore, special care must be given not only to the selection of the broad measure of saving that is most appropriate for the purpose at hand (national, private or household saving), but also to the specific measure chosen to best represent that category of saving.

Other Adjustments

There are further adjustments that can be made to each broad measure of saving. Several may well be relatively important, but serious attempts have not yet been made to quantify their effects on countries' saving rates. They may affect the denominator as well as the numerator of specific measures of saving rates, depending on the measure in question.

As regards these further, and not easily quantifiable, adjustments to saving rates, the OECD experts note that: (1) There is a good case for regarding part or all of educational expenditures as investment in human capital, rather than as consumption. (These expenditures currently are treated as public and private consumption in the national accounts.) (2) There is a tendency to underrecord a number of flows that have to be imputed in countries' national accounts. (3) Activities of the underground economy may affect saving, but the influence of this hidden sector of the economy on the national accounts is probably greatly exaggerated.

Treating educational expenditures as investment would raise the adjusted saving rates for the United States and Japan relative to those of other OECD countries, because the average expenditure on education in these two countries is substantially higher than it is in the other OECD countries.

To date, there are no estimates of the net effect on saving rates of taking account of the activities of the so-called underground economy and the underrecording of a number of flows that have to be imputed. The net result depends, of course, on whether these activities mainly affect consumption or investment. To the extent that reported consumption and income are lower than they actually are because of these activities, the reported saving rate would be higher than it actually is. If reported investment is lower than it actually is, the reported saving rate would be lower than its actual rate.

The OECD analysts point out that, for the United States and the United Kingdom, the activities of the underground economy that are excluded from the national income and product accounts do not exceed 3 percent of GDP, and may well be less. The reason for this is that many of the activities excluded for tax purposes are captured in the national accounts because of cross checks for these activities, and because expenditures and incomes are equal in the national accounts system, many of these activities show up as expenditures in the accounts.

There is a case for arguing that since expenditures of the underground economy are more likely to be captured in the national accounts than its income, saving rates would be lowered by these activities. However, to the extent that expenditures include the underground economy but income does not include it, the statistical discrepancy should reflect this balancing of greater income than reported in the accounts of the various countries.

Saving rates are also affected by the various amounts of defense expenditures by countries. Although the GNP of the United States is roughly 35 percent of the total of the industrial countries, defense expenditures by the United States account for roughly 60 percent of total expenditures of industrial countries. Since the national accounts treat defense expenditures as consumption, the saving rate of the United States is lower than it would be if part of these expenditures were treated as investment. According to some estimates, nearly 40 percent (or over $86 billion) of U.S. defense expenditures for 1983 may be regarded as investment; if this were the case, the national saving rate (on the U.S. national income accounts basis) would rise by approximately 2½ percent.[7]

The Effects of Inflation

One further factor to consider for the saving rates in the United States and the United Kingdom is that net household saving rates can be adjusted for gains and losses on monetary liabilities and assets. This represents, of course, only a partial adjustment for inflation, but, once again, the main intention is to present an alternative figure for use in appropriate circumstances alongside the conventionally reported figures. It may be used either as another saving figure, that is, as a proxy for "real" saving, or it may be used to help explain the direction of the actual changes shown by the reported figures.

The main adjustment made to nominal income is to separate actual interest payments into two components: one that compensates for the change in the real value of monetary assets and liabilities; and the other that represents "real" interest payments. Since debtors gain and creditors lose from this adjustment, the public sector and the corporate sector show greater "real" saving, while the adjusted saving of the household sector is reduced substantially.

The effects of adjusting partially for inflation on the net saving rate of the household sector are more substantial in the case of the United Kingdom, which has a higher rate of inflation, than they are for the United States. In fact, the rate becomes negative for the United Kingdom in several recent years, and the fall is especially steep in 1974 and 1975. Moreover, the net saving of the government sector becomes heavily positive for the same two years, thereby reversing the conclusion from the unadjusted figures that the net saving ratio of the household sector had risen while that of government had fallen substantially in the 1973 to 1975 period. The net saving ratio for the household sector in the United States is lowered, on average, by several percentage points, but in no case is it negative and in no case is it lowered by more than 3.3 percent. By contrast, in both 1974 and 1975 the fluctuation in the net household saving ratios before and after the adjustment for inflation exceeded 20 percent in the United Kingdom, with the figures moving from positive to sharply negative.

Saving and Government Deficits

One of the key points noted at the outset was that lower rates of saving could add substantially to financial pressures in those countries where government deficits are high relative to saving. The suggestion was that it could, therefore, be misleading to look only at the relation between government deficits and GNP or GDP.

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[7] For a broadly similar estimate, see Sydney L. Jones, "The Capital Budget Alternative," in Albert T. Sommers, (ed.), *Toward A Reconstruction of Federal Budgeting*. The Conference Board, Misc. Report 83-1, 1983.

It is now clear that it is no simple matter to choose any single notion of saving to use in comparisons with government deficits; and the results of these comparisons may well vary according to the measures of deficits and saving that are selected. Further, in any given period, the precise saving figure is what it is because the government deficit is what it is, and vice versa. In addition to this statistical, and substantive, interdependence, there is an element of double counting in many of the measures used in these comparisons. Gross and net national saving, by definition, include government saving or dissaving. Measures that relate the government deficit to national saving, therefore, include the government deficit in both the numerator and the denominator. Moreover, comparisons of the government deficit to national saving that are based on the SNA figures would deduct the consumption of fixed capital for the government sector from gross saving and the deficit. The resulting government deficit would, therefore, be lower than the deficit in the national accounts for countries such as the United States, whose accounts do not distinguish between the capital expenditures and current expenditures of the government sector. To relate the total government deficit to net national saving, as is sometimes done for the United States, is to assume that all government expenditures are current expenditures, which they are not.

There are other ways to view government deficits and saving. If the emphasis is on saving (gross or net), government saving or dissaving can be shown as a percentage of national saving; or government saving can be shown as a percentage of private saving.

For the United States, government deficits as a percentage of gross saving do not generally differ widely from government deficits as a percentage of gross private saving. Major exceptions to this general rule took place in 1975, when the Federal Government's deficit was 31.7 percent of gross saving and 24.5 percent of gross private saving; and again in 1976, when the former was 20.6 percent and the latter was 18 percent.

The same, however, is not the case for measures that relate federal deficits to net national saving and net private saving. Differences of well over 5 percent in these two net measures of deficits occur frequently—in six of the past twelve years. The most extreme difference occurred in 1975, when federal deficits amounted to 116 percent of net national saving and 56 percent of net private saving. Relating the deficit in 1975 to net national saving points up the limitations in viewing these measures too mechanically. To conclude, for instance, that "the federal deficit *accounted for* 116 percent of net saving in 1975" implies the opposite of what really happened that year. Rather than usurping the nation's net saving, the large federal deficit in 1975 was the *result* of the recession and the unwillingness of private borrowers to use (invest) the nation's saving. Attempts by the government to reduce its deficit by raising taxes or cutting expenditures would have complicated rather than solved the problems of that period. The reluctance of the private sector to borrow is confirmed by the developments in credit markets in 1975. Corporate funds raised in credit markets fell from $83 billion in 1974 to $42 billion in 1975, or from more than 43 percent to less than 20 percent of net funds raised by nonfinancial sectors in U.S. credit markets.

If, rather than emphasizing saving, the main objective is to obtain a gauge of pressures on financial markets, the public-sector borrowing requirement of each country may be shown as a percentage of total credit-market funds raised by nonfinancial sectors. Using this measure for the period 1973 to 1980, the percentage of total funds is greatest for Japan and the United Kingdom, averaging roughly 40 percent and 36 percent, respectively. In the United States, the public-sector share averages 26.5 percent annually—the second lowest of five major countries, and slightly below the 27 percent average in the Federal Republic of Germany. In France, the public sector share is 23 percent, the lowest annual average for the five countries. (See Chart 6.)

Investment

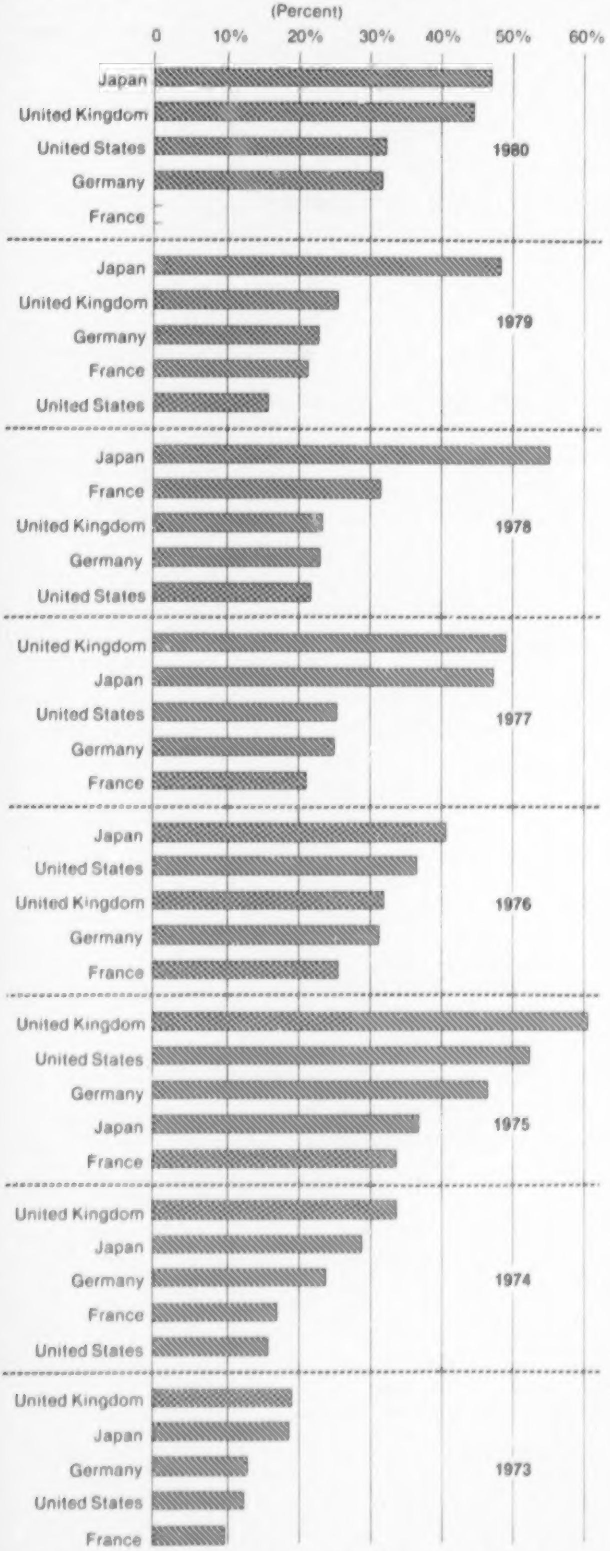
The preceding analysis has dealt exclusively with different measures of saving. However, just as there are many measures of saving for each country, so, too, are there many measures of investment. Since saving is, by definition, equal to investment, gross national saving equals gross national investment and net national saving equals net national investment: In each case, the measure of investment varies with, and is equal in value to, the measure of saving.

Similarly, the adjustments made to each measure of saving, such as those discussed earlier, are reflected in the corresponding measures of investment. The inclusion of consumer durables, for instance, raises both saving and investment by the value of the consumer durables that are added to each.

In international comparisons, gross or net fixed capital formation is frequently used as a broad proxy for investment. Statistically, however, the figure for capital formation is not likely to be equal in value to the corresponding figure for saving. Rather, fixed capital formation normally differs from saving by the amount of the statistical discrepancy, by the value of inventories or "stock," by the amount of net changes in the flow of capital to the rest of the world, and, if private measures of saving and investment are used, by the amount of government saving or dissaving.

The figures for gross fixed capital formation as a percentage of each country's GNP show that Japan is, far and away, the country with the highest percentage of

Chart 6: Government Share of Credit¹



1)Public sector share of total credit market funds raised by non financial sectors
Source: OECD

capital formation; and, as was the case with the unadjusted saving ratios, the United States and the United Kingdom are the two countries with the lowest ratios. (These figures do not include consumer durables as part of capital formation. Their inclusion would increase the relative position of the United States.)

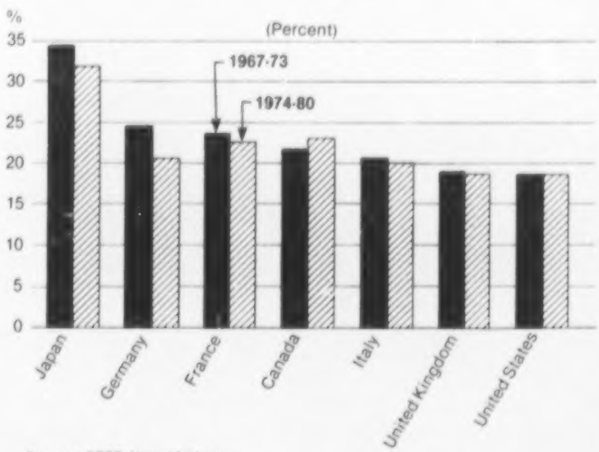
However, a comparison of each country's gross fixed capital formation to its GNP for the periods 1967 to 1973 and 1974 to 1980 shows that the average annual ratio has fallen for Japan, the Federal Republic of Germany, France and Italy. Contrary to initial impressions, it has remained about the same for the United States and the United Kingdom; and it has risen for only one major country, Canada, whose average annual growth of capital formation for the latter period is second only to that of Japan (Chart 7). These data broadly reflect the earlier findings in this study that resulted from comparing each country's gross national saving to its GDP.

Capital Formation and Economic Growth

The importance of increasing the rate of saving and investment lies in the effects on the overall economy—that is, on the extent to which higher rates of investment increase the nation's overall rate of real economic growth. International comparisons of countries' real economic growth with their rates of growth of investment and fixed capital formation do not, however, show a uniform connection, although the experience of several major countries is consistent with a causal relation between the two.

Studies of the connection between capital formation and growth to date yield conflicting results and leave open the question as to the relative importance of investment in determining real growth. The findings vary according to the measures of investment used, the time

Chart 7: Gross Fixed Capital Formation



Sources: OECD; United Nations

period chosen, and a number of technical adjustments for measuring countries' real investment on a comparable basis.

Real economic growth in Japan, in line with its capital formation, is far higher than the rates of growth of the other major industrial countries. The United States and the United Kingdom, once again, have the lowest average annual rates of growth though, surprisingly, that of the Federal Republic of Germany is only slightly above the average annual growth of the U.S. economy. Real growth in the majority of the major industrial countries does not reflect their relative rates of growth of fixed capital formation.

Although average annual real economic growth in the United States is the second lowest of the seven major countries for the period 1974 to 1980, the decline in growth of the U.S. economy from the earlier seven-year period, 1967 to 1973, has been less (both in absolute and in percentage measures) than that of all the other major countries. This point is seldom made in critical examinations of the performance of the U.S. economy in the 1970's.

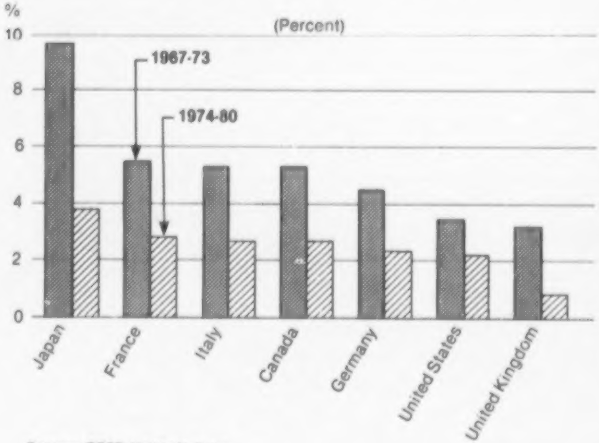
The largest decline in real growth, nearly 6 percent annually, took place in Japan. The largest decline in relative measures, however, took place in the United Kingdom, where average annual real growth fell by more than 70 percent. Gross fixed capital formation, as noted above, remained about the same for the United Kingdom during each of the two seven-year periods. Real economic growth in the Federal Republic of Germany, which had averaged a full percentage point above that of the United States during 1967 to 1973, was just about the same as that of the United States during 1974 to 1980. Growth in France, Canada and Italy averaged approximately one-half percent above that of the United States during 1974 to 1980, in each case down substantially from their rates during the earlier period. (See Chart 8.)

Appraisal of International Saving Rates

This study has shown that there are many measures of saving rates and that the relative ranking of all countries—including Japan— varies according to the measure used and the time period chosen. It has also shown that there are numerous adjustments that may be made to each broad measure of saving: national saving, private saving, and personal saving. According to most adjusted measures of saving, Japan has the highest rate of saving among the major industrial countries, and the United Kingdom, not the United States, has the lowest rate of saving.

Movements in the industrial countries' saving rates during the 1970's have been, in many cases, the opposite of general perceptions as to how saving rates have changed in magnitude and, in some cases, in direction. Between 1970 and 1980, gross national saving rates in the United States and Canada rose slightly, while those of five other major countries fell, with the largest decline taking place in Japan, where the rate fell from slightly over 40 percent to less than 31 percent. Changes in rates of gross fixed capital formation have reflected changes in gross saving for the majority of countries. Japan remains the country with the highest rate of capital formation, but it is also a country in which the average annual rate of capital formation to GNP has fallen, while it has remained about the same for the United States.

Chart 8: Real Growth of Major Countries



Sources: OECD; United Nations

In addition to various measures of saving—and adjustments that may be made to each of these measures—saving rates among countries differ because of differences in culture, institutions and stages of development. No attempts have been made to quantify the effects of these differences, but there can be speculation as to the direction of the effects in some cases. It is frequently noted, for instance, that, in Japan, a high percentage of workers over age 60 are still employed and, by itself, this should lower the Japanese saving rate. It is less well appreciated that the primary employment of many Japanese ceases at age 55, and this should increase the saving rate substantially. While it may be difficult to quantify the net effect of these two "institutional" differences, which pull the saving rate in opposite directions, the latter would appear to be the more important of the two, and part of the high saving rate in Japan may be attributable to the earlier retirement age from primary employment.

Despite the important advances in placing saving rates of countries on a more comparable basis, both quantifiable and nonquantifiable differences remain. These differences are probably important enough to call into question any policy conclusions for a single country that are drawn from its relation to the saving rates of other countries. Policy decisions to increase specific measures of saving should be made largely on the basis of national criteria rather than upon what is happening in other countries. Indeed, there is no economic basis for arguing that the saving rate in the United States should be the same as that of Japan, or of most countries in Europe.

For any individual country, it can be argued that, since saving equals investment, policies should be introduced to increase the rate of saving to promote new investment. Even if policymakers could agree on the appropriate measure of saving, there are at least two further steps to consider before adopting policies to raise the saving rate. It is possible under economic conditions similar to those that most countries faced in 1982 (i.e., high rates of unemployment and low levels of capacity utilization) that policies to increase *rates* of saving could result in far less additional real saving to the economy than other measures that increased GNP more immediately and substantially. And, under more favorable economic conditions than now exist, there is still the question as to whether the government should try to change existing market preferences substantially.

If a country's major goal is to promote investment, it is important to adopt policies that truly increase national saving, rather than merely shift saving from one sector to another. It is also important to decide whether it is more effective to emphasize measures that promote saving or those measures that more directly promote investment. Finally, if a country's ultimate goal is to raise the rates of real economic growth on a sustainable basis, measures to promote capital formation should be considered in the wider context of other and, in some cases, equally important, determinants of real economic growth.

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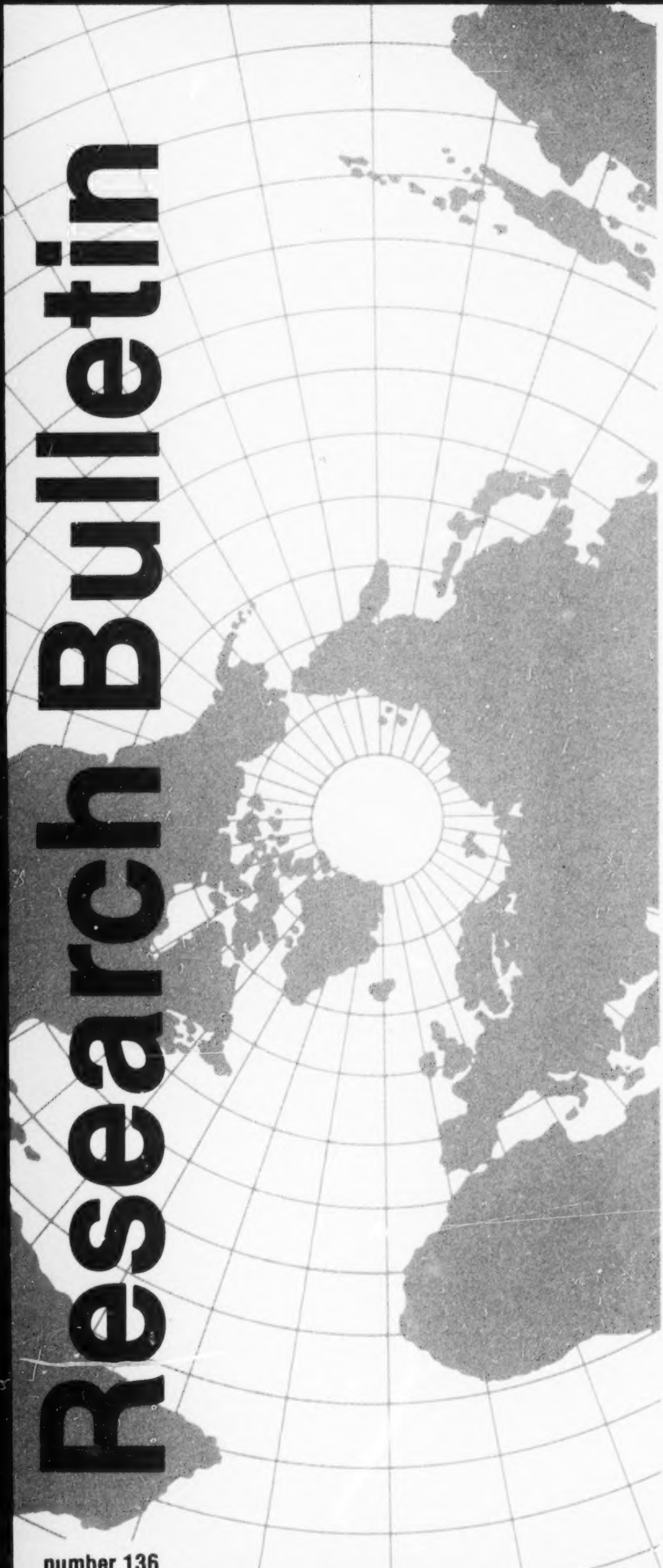
Research Bulletin



International Economic Policies:

Coordinate or Go It Alone?

by John Hein

The Conference Board

number 136

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AT ABOUT THE TIME this report is being distributed, the leaders of the seven largest industrial countries will be meeting in Williamsburg, Virginia, for the 1983 economic summit. As in the previous eight such meetings, from Rambouillet in 1975 to Versailles last year, their major objective will be to informally exchange views on the state of the world economy and to discuss—tentatively, if at all—a joint course of action for the immediate future. There is no way of telling whether the meeting will conclude with an official communique or merely with a less formal press briefing summarizing the discussion. But in either case, as one advance notice has it, the seven leaders "will discuss how the domestic policies and politics of each have impact on the others."[1]

The effect that national economic policies have on other countries and the need to aim for better coordination of such policies—too often, though, that term is not defined further—have been at the center of the current debate concerning the state of the world economy and the means of engineering a lasting recovery. There is no dearth of fashionable buzz words adorning that debate—in addition to policy coordination, we hear of concerted action, combined thrust, joint surveillance, convergence of policies, sharing of international responsibilities, and the like.

To those who have followed the tortured course of international economic affairs over the past decade or so, the discussion has an all too familiar ring. The terms used, the exhortations made, and the warnings sounded all echo the battle cries of the mid- and late-1970's, and recall the skirmishes then fought at international meetings, in the media, and in learned papers. When the world economy was plunged into the 1974-1975 recession—until then, the severest of the entire post-World War II period—coordination, convergence and pulling together were also the slogans of the day.

This study deals with international economic policy coordination in the broadest sense. It first discusses the meaning of the term, the forms such action can take, and how policies were actually formulated—without apparent coordination—following the two oil price shocks of the 1970's. It then looks at two other remedies for economic recovery that have been recommended again recently—what in the 1970's were called the "locomotive" and "convoy" approaches. The final sections of the study examine the role of the major actor on the scene, the United States—specifically the extent to which the rest of the world impinges on the U.S. economy and the general relationship between economic activity in this country and in its major trading partners.

Interdependence and National Economic Policies

Much of the advocacy of international policy coordination or concerted action springs from the heightened feeling of interdependence among countries. This growing awareness of the "oneness" of the world is one of the big differences between the 1950's and the 1970's and 1980's. The exploration of space; the worldwide shocks generated by two massive oil price increases; increased global concerns over population, the sea bed, and the environment—all betoken the view of a highly interdependent system.

Yet, we still live and will continue to live in a world of independent nation-states, or what Miriam Camps of the Council of Foreign Relations has called "a mixed system." In her recent *Collective Management: The Reform of Global Economic Organizations,* a study in the Council's 1980's Project, she writes (p. 24):

"We are caught in the process of transition between two modes of thinking about and of dealing with many problems, gradually and erratically moving from what might be called 'international economics and politics' to what might be called 'world economics and politics.' Usually we think and operate in the first mode, but occasionally we use the second. When acting in the first mode, we are seeking a more or less frictionless interaction between the external sectors of 150 or more national economies. . .When acting in the second mode, we are trying to do something rather different and to promote the efficient functioning of a closed global system."

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[1] United States Council for International Business, *Release,* February 14, 1983.

This conflict between rapidly increasing international economic interdependence and the continuing desire for national independence in the sphere of policymaking is really not new. It was spelled out as long as 15 years ago by Professor Richard Cooper of Yale, who saw as the central problem "how to keep the manifold benefits of extensive international intercourse free of crippling restrictions while at the same time preserving a maximum degree of freedom for each nation to pursue its legitimate economic objectives."[2]

Too often, however, policy coordination, invoked in the name of interdependence, is confused in the popular mind with countries moving in the same direction and along the same track, when in fact its dictionary definition implies no more than harmonization or acting in a concerted way. Most thoughtful observers point out—and rightly so—that coordinated action by itself does not necessarily mean simultaneous or parallel action taken by all concerned.

The argument has, in fact, been made that in "normal" periods the aim of policy coordination should be for countries to move in opposite directions—that is, to desynchronize their economic fluctuations in order to avoid worldwide booms and recessions. Indeed, the most wrenching dislocations in recent decades have occurred when cyclical fluctuations were most strongly synchronized among the major countries—as in the Korean boom of 1950-1951, the commodity boom of 1972-1973, and the recessions of 1974-1975 and 1980 and 1982. Coordination is, therefore, seen rather as "a set of mutually consistent policies on the part of individual countries which while respecting the interests of each individual country, collectively add up to an outcome that is satisfactory for the world as a whole."[3] (One would, of course, hope for a "satisfactory outcome" for all economies combined, whether policies are coordinated or not.)

Moreover, the argument continues, while at the present time there is general agreement on the need for more stimulative policies, the actual variations in the type of stimulus ought to be better coordinated. Countries with high interest rates, an overvalued currency, and a large true fiscal deficit—like the United States—should relax their monetary policy. Countries with low real interest rates, an undervalued currency, and a modest fiscal deficit—read: Japan—should cut taxes or increase government spending. This again is a proposition that makes eminent sense; therefore it might be heeded by most countries, whether acting alone or on a coordinated basis.

In fact, much of the discussion recognizes that international economic adjustment is—indeed, cannot be more than—the cumulative result of all the various national actions and that the problems of achieving such adjustment arise increasingly from differences in the respective national economic policies. Still, individual responses to a given common situation have to be differentiated and "each country must contribute in a manner appropriate to its particular situation."[4] In a similar vein, the Commission of the European Communities noted recently that "nothing can relieve each country from its own efforts."[5]

Yet, the blandishments of coordination are dangled before us almost continuously by politicians and the media. Moreover, in both major booms and recessions a prime argument for seeking policy coordination is the sharing of the necessary burden of adjustment and thereby the avoidance of "free rides" by some countries that might not be playing the game. Basically, how are we to conceive of this somewhat elusive term?

Aims and Means of Policy Coordination

At one extreme, policy coordination might mean acceptance of the international economic system and the degree of interdependence it confers and to reconcile all domestic policy measures with its existence. This would involve a more efficient mechanism of automatic adjustment between countries, such as completely freely floating exchange rates and a choice of domestic policy tools that have the minimum external effect.

A middle way—and one that is implied most often when the term "coordination" is used—would involve efforts to adjust national goals and domestic policy decisions to the increasingly international character of the global economic system. At the simplest level, such cooperation calls for no more than an exchange of information about what is being done, or is being considered, for the near future. Such an approach, in other words, amounts to informed decision making at national levels.

A more ambitious form of cooperation would involve the actual coordination of policy instruments, largely to avoid strong external disturbances to one's trading partners. Such cooperation might extend to interest rates, monetary growth rates, and exchange rates. A final, and even more ambitious, form of cooperation calls for actual coordination of policy targets—an almost impossible task since it would require considerable agreement among governments about national preferences and goals.

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[2] Richard N. Cooper, *The Economics of Interdependence*. New York: McGraw-Hill, 1968, p. 5.

[3] John Williamson, "Global Macroeconomic Strategy," in *Promoting World Recovery*. Washington, D.C.: Institute for International Economics, December, 1982, p. 31.

[4] Peter B. Kenen, "Concluding Comments," in *From Rambouillet to Versailles: A Symposium*. Essays in International Finance, No. 149, Princeton University, December, 1982, pp. 37-38.

[5] Commission of the European Communities, *European Economy*. Luxembourg, November, 1982, p. 18.

The View From Washington

Q. Would the United States alter domestic economic policies because of their unfavorable impact on foreign countries?

A. I think we would agree to be conscious of the impact of our policies on others. We are getting very conscious of the effects of domestic policies on the international market. And probably as a result we would tend to temper some of the things that we do.

Interview with Treasury
Secretary Donald T. Regan,
by Clyde H. Farnsworth,
The New York Times,
March 29, 1983.

I have argued elsewhere that the type of policy coordination that appears to have emerged from the successive economic summits amounts to little more than reaching some kind of understanding on "shared objectives."[6] This is probably the most that can be hoped for, since the summit countries (and their smaller partners) are characterized by vast differences in the perception of various economic danger signals and in the efficacy of various conventional policy tools, as well as in the influence exerted on economic events and policymaking by political events and constraints.

Looked at another way, at the lowest level coordination can be interpreted in a negative way—simply not doing anything that would upset the applecart. That would mean, for example, the avoidance of explicit beggar-my-neighbor policies, such as the use of trade barriers or exchange-rate policies to help solve domestic economic problems. This sort of "cooperation" has been more or less an underlying assumption of the post-World War II international economic system.

As Marina Whitman, formerly of the University of Pittsburgh, has argued, there is some long-standing precedent for the adaptation of domestic economic policies to conform to international requirements.[7] The increasingly stricter "conditionality" of International Monetary Fund assistance to member countries involves just such modification of domestic policies to achieve adjustment within an international framework. And such modifications have been demanded not only of developing-country borrowers, since the conditions imposed by the Fund in loan negotiations with both Italy and the United Kingdom in 1976 also represented such intervention or "coordination." The question then is whether such adaptation can take place continuously and in a spirit of cooperation, rather than intermittently and only in situations of slumping economic activity and balance-of-payments difficulties.

As Whitman also pointed out, it is quite easy to assume that policy coordination has in fact occurred, when common exogenous disturbances have merely provoked common policy responses in the major countries. Moreover, because of the assumed randomness of policy responses, one might expect that the relative magnitude of fluctuations in the world economy as a whole would be smaller than the average magnitude experienced by individual countries. Economic disturbances, however, have been found to be systematic rather than random so that these dampening effects of the "risk-pooling argument" fail to apply. Rather, asymmetries in economic behavior and in policy responses cause the international system to transmit economic disturbances between countries and tend to magnify them in the transmission process.

Oil Shocks and International Economic Policy

The history of the past decade furnishes us with a good example of the apparent lack of coordination of economic policies among the major industrial countries. The two oil price increases of 1973-1974 and 1979-1980 (also referred to as 'OPEC I' and 'OPEC II') provoked different responses among the major oil importers, and it is probably accurate to state that these responses were not coordinated or the result of consultation among them.[8]

The economic impacts of OPEC I and OPEC II on the industrial world were roughly comparable. It is true that the second price hike—from $13 to $31 a barrel—looks less severe than that of OPEC I, when the price quadrupled in about a year. But such a comparison is slightly misleading because of the relatively low level—about $2.80 per barrel—from which oil prices took off in 1973-1974. In aggregate terms, both price hikes forced the major industrial countries to pay an "oil tax" equivalent to about 2 percent of their combined national incomes.

Despite the similar economic impact on both occasions, the policy reactions of the major countries were more determinedly anti-inflationary the second time around. Following OPEC I, some countries had moved to offset the "oil tax" of some $68 billion in 1974 by

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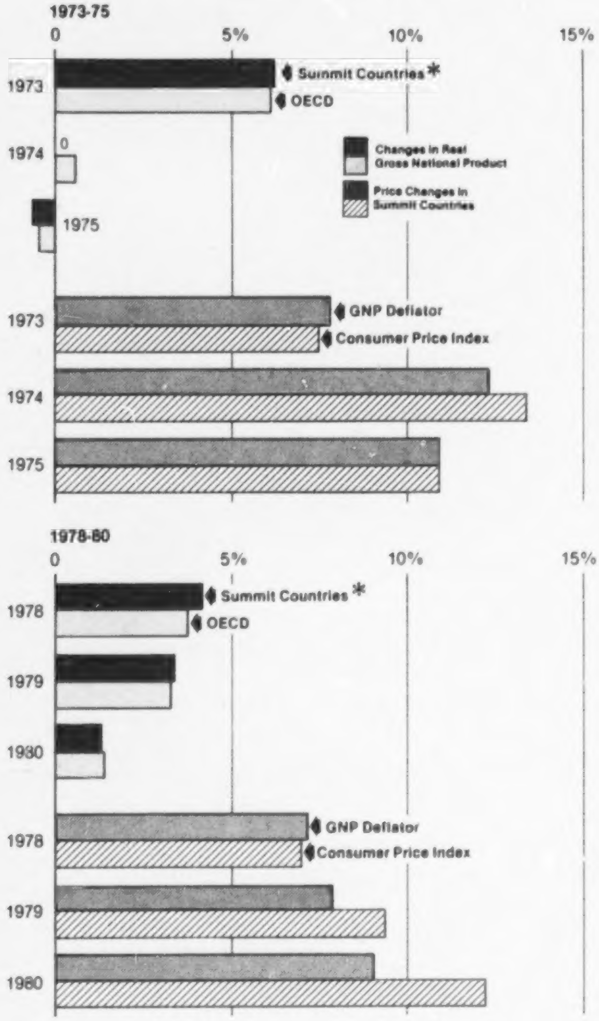
[6] John Hein, *From Summit to Summit: Policymaking in an Interdependent World.* The Conference Board, Report No. 774, 1980.

[7] Marina v. N. Whitman, *Sustaining the International Economic System: Issues for U.S. Policy.* Essays in International Finance, No. 121. Princeton University, June, 1977.

[8] For a detailed discussion of the policy response to the two oil price increases, see John Hein, *Oil Shocks and Economic Adjustment.* The Conference Board, Research Bulletin No. 113, 1982.

Chart 1

Growth and Inflation, 1973-75 and 1978-80



* United States, Canada, Japan, France, Germany, Italy and United Kingdom

Source: Organization for Economic Cooperation and Development

expansionary measures at home. These, in turn, resulted in increased budget and balance-of-payments deficits and, often, serious inflationary pressures. In the wake of OPEC II, therefore, attempts were made to limit the overall inflationary consequences and to encourage the appropriate cost-price relationships.

Overall, inflation was somewhat lower in 1979-1980 than in the two years following OPEC I. In all major industrial countries as a group, consumer prices rose by about 24 percent during the earlier period as against 20.5 percent during the latter one. The concentration of those price rises also differed. During OPEC I, prices soared during the first 12 months of the oil shock, while in 1979-1980 their acceleration was considerably smoother and more protracted.

Another notable contrast between the two episodes was that the decline in economic activity in the industrial countries was somewhat less severe the second time around. One reason for this development was that business activity in the major countries was somewhat less synchronized than just prior to the 1975 recession, when most of the industrial countries had reached the end of their recovery phase simultaneously. Thus, in contrast to the United States, where real gross national product fell by 0.2 percent in 1980, Germany and Japan registered GNP growth rates of 1.8 and 4.2 percent, respectively. This decidedly uneven—one is tempted to say uncoordinated—performance resulted in a 1980 growth rate of 1.2 percent for the seven summit countries as a group, which contrasted sharply with zero growth in 1974-1975 (see Chart 1).

This marked contrast between the two OPEC episodes did not go unnoticed. As one author observed: "The difference in the international mood following the first oil shock in 1974 and the second in 1979 was . . .striking."[9] As domestic demand and incomes were squeezed for the second time in less than a decade by higher energy prices, the authorities of the industrial countries made no serious attempt to coordinate their policy reactions in order to avert an economic downturn. The most important factor, Shonfield surmises, was that in the intervening five years they had had the rather novel experience of sustained high rates of inflation associated with relatively low levels of economic activity. This "made them nervous about policies which deliberately aimed to give a boost, however temporary, to domestic demand."

In fact, one striking aspect of OPEC II was that the second oil price rise was permitted to feed through the system much more rapidly than during OPEC I, when a number of countries had attempted to suppress or postpone the inevitable inflationary consequences. During OPEC II, by contrast, most countries allowed domestic energy prices to increase, so as to reduce dependence on imported energy. The United States, for instance, abolished the remaining price controls on domestically produced oil; Belgium adopted special energy-use taxes; and France and Italy introduced sharply higher public-utility charges.

These were then, one might say, natural reactions on the part of individual national authorities to the realities of the situation, and certainly not the outcome of attempts at coordination of those policies. Or, to go back to Whitman's point, it might be easy for an outside observer to assume that policy coordination had, in fact, occurred when common outside events had merely led to common policy responses.

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[9] Andrew Shonfield, "The World Economy 1979," in America and the World 1979, *Foreign Affairs* (Special Issue, Vol. 58, No. 3), p. 607.

The Locomotive Approach

Given the current state of the world economy, the call has gone out for the United States, or a handful of the larger countries, "to lead the world out of recession." Thus, Beryl Sprinkel, Under Secretary of the Treasury for Monetary Affairs, declared at a news conference in Paris last January—in an unofficial capacity, as it turned out—that it was "critically important" for industrial countries that had made good progress in the fight against inflation to take steps to assure "a credible economic expansion." More recently, former West German Chancellor Helmut Schmidt wrote that worldwide economic cooperation was not "imaginable without American leadership. . .Economic strength, as well as political and military power, predestines the United States to take the lead."[10]

While the term "locomotive" has not entered this debate so far, these recommendations strongly echo the earlier so-called locomotive approach to world economic recovery. That approach made its first appearance around 1976 and 1977, against a background of increasing dissatisfaction with the direction and pace of the economic recovery then under way. The argument itself had appeared as early as 1975 in the Organization for Economic Cooperation and Development's (OECD) year-end outlook, but it was in the less than satisfactory economic environment of 1976-1977 that it truly came to the fore. The so-called McCracken Report, *Towards Full Employment and Price Stability,* published by the OECD in June, 1977, suggested "that the favorably-placed countries which presently could expand more rapidly without risk of additional inflation should accept responsibility for maintaining the momentum of the recovery in world economic activity." (p. 237)

One version of this argument maintained that domestic expansion in the three stronger "locomotive" countries—the United States, Germany and Japan—would generate sufficient exports in the weaker countries to contribute significantly to world economic expansion in general. In other words, the so-called intercountry multipliers (i.e., the effects of spending by one country on income and output in another) would do the trick. Still, the size and actual transmission effects of those multipliers were being widely questioned.

Thus, the OECD's own international linkage model, developed in the late 1970's, suggested that a 1 percent autonomous domestic expenditure increase in the United States would boost growth in the seven summit countries by no more than 0.84 percent after a twelve-month period and by no more than 0.74 percent for the OECD as a whole. Similar 1 percent expenditure increases by Japan and Germany each would add less than ¼ of 1 percent to growth in the seven countries combined. These results were in broad aggreement with those derived from other econometric models, such as Professor Lawrence Klein's LINK model at the University of Pennsylvania, and with simpler calculations based on the importance of each major country's exports to the United States.

Another, somewhat less simplistic, version of the locomotive theory held that the mere example of a vigorous expansionary posture in the locomotive countries would help loosen domestic policy restraints in the weaker countries—that is, the fear of getting out too far ahead of their trading partners by expanding domestically themselves. In fact, the entire theory soon became the basis for a lively discussion, which, as Whitman noted, "produced heated, if somewhat stylized, debates among national delegates at international meetings, has heightened tensions in economic relationships among the leading nations of the 'Western' alliance, and has become the major topic of discussion at summit meetings of their heads of state."[11]

But reality soon proved that the international ramifications of such a policy were just too strong to allow a single country to plan its own actions without regard to their external implications. The foremost example is that of the United States which expanded its economy in 1977 and thereby moved clearly out ahead of other major industrial countries, mainly Germany and Japan, whose expansions did not parallel it. This led to a U.S. trade deficit of unprecedented magnitude, a severe depreciation of the dollar, and the renewal of strong inflationary pressures at home. While estimates vary, it is believed that perhaps as much as one-third of the 1977 trade deficit of $30.8 billion dollars was attributable to the disparity in the rates of cyclical expansion between this country and its major trading partners.

Again, at the 1978 Bonn economic summit, Germany pledged to provide additional fiscal stimulus equivalent to up to 1 percent of GNP. As we now know, the results were disastrous—sharply higher domestic inflation, balance-of-payments deficits (the first since 1950!) averaging $10 billion a year between 1979 and 1981, and a depreciating D-mark.[12] Lesser, but by no means less instructive, examples of the difficulties of trying to go one's own way in an increasingly interdependent world are the recent experience of Mexico and Mitterand's France.[13]

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[10] Helmut Schmidt, "The World Economy at Stake," *The Economist,* February 26, 1983, p. 30.

[11] Marina v. N. Whitman, "The Locomotive Approach to Sustaining World Recovery: Has it Run Out of Steam?," in William Fellner, ed., *Contemporary Economic Problems 1978.* Washington, D.C.: American Enterprise Institute for Public Policy, 1978, p. 252.

Thus, even if the United States were to embark on a course that would transform it into a locomotive for the rest of the world, such an expansion might well be derailed by a renewed depreciation of the dollar before other countries had their export increases spark a full-fledged recovery. Moreover, since the United States is a large "common market," it buys relatively little from the rest of the world. Last year, merchandise imports equaled less than 9 percent of GNP and only 36 percent of those imports came from Western Europe and Japan. At one point last year, the OECD estimated that even if the U.S. economy had grown by 2½ percentage points in 1982, the boost to growth in Western Europe and Japan would have been no more than an additional 0.4 percentage points.

The Convoy Approach

The call for expansion by countries in a position to do so—or, in Helmut Schmidt's words, "some countries have more room for maneuver than others" and this room "can be expanded by concerted action"—similarly echoes a specific policy recommendation of the late 1970's. At its first 1978 meeting, in early March, the OECD's Economic Policy Committee had agreed on the desirability of a "concerted effort" which, in contrast to the locomotive approach, would involve a larger number of countries.

This greatly expanded scenario distinguished three groups of countries: (1) those with strong internal and external positions that could afford to expand at a moderate, but still significant, pace; (2) those in which domestic stabilization policies had been characterized by "very-very cautious attitudes," but which had had "some measure of success" and, therefore, were in a position to move cautiously in the direction of expansion; and (3) those that should remain "extremely chary about stimulating their economies further."

As an illustration of what such a "concerted effort" might accomplish, the OECD Secretariat worked out two simulations. The first estimated what would happen if the five countries in the first group—Japan, Germany, Belgium, the Netherlands, and Switzerland—were to expand their economies by an extra 1 percent. Such action "would not only provide an impetus to these economies but would also feed back" to them. Still, this would boost total output in the 24 member countries by no more than 0.78 percent.

The second simulation suggested what would happen if the so-called convalescent countries—Canada, France, Italy, and the United Kingdom—seized on the benefits which the action taken by the first group conferred on their external accounts and began to expand on their own. "If they expanded in such a way that their imports increased to match the rise in their exports, they would have higher GNP, yet their balance-of-payments situation would be no worse than before the 'concerted effort' began." On this second assumption, the growth rate for the entire OECD area would be boosted by 1.1 percent above what it would otherwise have been.

The press immediately dubbed the concerted effort the "convoy approach," in contrast to the earlier "locomotive approach." However, Charles Schultze, then chairman of the U.S. Council of Economic Advisers and also of the OECD committee, found the term inappropriate. "I think there is some problem with that analogy," he was quoted as saying, "since my recollection of a convoy is that every truck travels at the same speed, and that's not what we are suggesting."[14] He might have added that it is the speed of the slowest member of the group.

Whether the term was accurate or even appropriate, the OECD's simulations made it quite clear that the greatest contributions to world growth still would have to originate in the strong countries—the original "locomotives." Moreover, at the time of the Bonn summit in 1978 there was evidence that the "convalescent" countries—Britain, France and Italy—would have taken expansionary measures anyhow, whether or not a new approach to world economic growth had been formulated. Calling the operation "concerted action," however, gave it a somewhat more purposeful air, while at the same time taking some of the pressure off Germany and Japan.

In any event, the Bonn summit resulted in individual pledges by the seven participants to take specific action, depending on their particular situations, to raise the level of growth, encourage or increase domestic demand, and fight inflation. "Sustained effort," rather than impossible and unattainable promises, constituted both the tone and the reality of the meeting. Thus, while that meeting agreed "on a comprehensive strategy," covering a wide spectrum of international issues, each country committed itself merely to contribute to the overall scheme according to its own lights and by its own, separate policy package.

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[12] Campaign politics seem to have entered here, too. Haberler has remarked that "the decision to give in to the pressure to act as a locomotive was probably made easier by the realization that pumping up the economy was bound to help the government in the upcoming election." Gottfried Haberler, "The Economic Malaise of the 1980's: A Positive Program for a Benevolent and Enlightened Dictator," in William Fellner, Project Director, *Essays in Contemporary Economic Problems*, 1981-1982 Edition. Washington, D.C.: American Enterprise Institute, 1981, p. 236.

[13] Cf. also Helmut Schmidt's remark that "France's example has shown that purely expansionary national measures are not enough if they are not supported by coordinated action by other countries." "The World Economy at Stake," p. 23.

[14] "Concerted Effort for Expansion," *The OECD Observer*, March, 1978, p. 12.

Then Treasury Secretary Blumenthal felt that "the thrust of the three previous summits reached the height of refinement at Bonn."[15] However, separate national policy packages—which by sheer luck add up to a grand and orderly design—are probably as far as concerted action can ever hope to go. The current debate over "policy coordination" or "a set of mutually consistent policies" can thus imply no more than individual countries' policy programs that somehow, in the aggregate, come to form a comprehensive strategy. Or, as a long-time member of Congress remarked some years ago: "There are those who would question the wisdom of an annual economic summit, primarily because it is so difficult for America or any other nation to get all the bricks into place."[16]

The United States in the World Economy

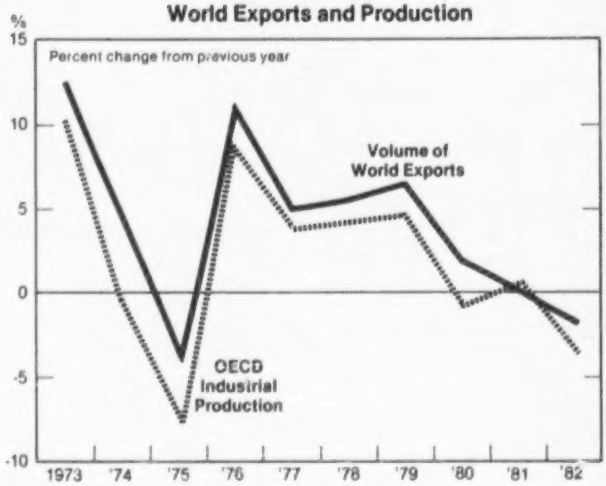
Whether economic policies ultimately will be coordinated or will converge, whether world economic recovery will come about through the locomotive or the convoy approach, it is a fact of life that policy decisions and the resulting changes in economic activity in the major countries *do* have an impact on other countries' economies. The vehicle for this transmission effect is, of course, world trade—world economic activity and world trade being closely related in fact (see Chart 2).

This has become of no small importance to the major actor on the international economic scene, the United States, since the increasing economic interdependence among countries has brought with it a significant increase in this country's "openness" and, therefore, in its sensitivity to influences emanating from abroad. The ratio of U.S. merchandise trade to gross national product doubled between 1970 and 1980—a far larger percentage increase than for any other industrial country, although starting from a very small base. The ratio of foreign trade broadly defined—that is, including both goods and services—to GNP similarly rose from about 10 to 25 percent over the same period.

Since international investment increased even more rapidly than international trade, the flow of investment income rose even more. U.S. receipts of income on its foreign investment, both direct and portfolio, had been equivalent to less than 1 percent of GNP in 1960, but rose to 2.8 percent in 1980. U.S. payments of such income to foreigners, which had been equal to only 0.2 percent of GNP in 1960, had risen to 1.6 percent in 1980. Moreover, income from U.S. foreign direct investment has become a substantial part of overall corporate profits—nearly 15 percent of such profits before, and over 22 percent after, taxes.

Chart 2

World Exports and Production



Sources: Organization for Economic Cooperation and Development, International Monetary Fund

The rapid increase in foreign direct investment in general—witness the expansion of foreign investment in the United States, the so-called financial invasion of America—has been accompanied by an increase in the international mobility of financial capital of all types—of funds, that is, that do not entail the control of enterprises. The stock of such assets appears to have increased greatly in relation to such other aggregates as output, international trade, or total wealth. This, of course, brings with it a certain reduction in the freedom of the U.S. monetary authorities to pursue their policies independently of developments in other countries.

In fact, the developments just sketched connote a definite erosion in the dominant economic position which the United States had held in the early post-World War II period—an erosion that, according to some observers, suggests a return to more normal historical patterns. At the same time, this weakening of the earlier U.S. leadership, the greater integration of trade, and the internationalization of holdings of liquid assets, combined with the tendency of individual countries to pursue their own short-term interests in the area of economic policy, make the world economic system much more vulnerable to cyclical disturbances. In the United States, especially, this interdependence has come to be seen as a two-edged sword. There is, generally speaking, growing

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[15] Testimony before that Joint Economic Committee. Department of the Treasury, *News* (B-1716), July 11, 1979, p. 2.

[16] Representative Parren J. Mitchell at Joint Economic Committee hearings, *The 1978 Midyear Review of the Economy*, July 12, 1978, p. 277.

Table 1: Real Gross National Product and Domestic Demand, 1974-1982

	GNP	Net exports	Domestic demand	Change in GNP	Change in Domestic demand	Impact of net exports
	(Billions of 1972 Dollars)			(Percent)		(Percent)
	(1)	(2)	(3)	(4)	(5)	(6)
1974	1,248.0	27.8	1,220.2	−0.6	−1.6	+1.0
1975	1,233.9	32.2	1,201.7	−1.1	−1.5	+0.4
1976	1,330.4	25.4	1,275.0	+5.4	+6.1	−0.7
1977	1,371.7	21.9	1,349.8	+5.5	+5.9	−0.4
1978	1,436.9	24.6	1,412.3	+4.7	+4.6	+0.1
1979	1,483.0	37.7	1,445.3	+3.2	+2.3	+0.9
1980	1,474.0	50.6	1,423.4	−0.6	−1.5	+0.9
1981	1,502.6	42.0	1,460.6	+1.9	+2.6	−0.7
1982	1,476.0	30.9	1,445.1	−1.8	−1.1	−0.7

Source: U.S. Department of Commerce

concern with the impact on the domestic economy of economic policy decisions taken abroad. At the same time, however, there appears to be continued reluctance on the part of U.S. policymakers to subordinate policy decisions, and hence the country's own domestic interests, to the broader considerations of an effective and efficiently functioning international system.

How powerfully the outside world impinges on the U.S. economy was made amply clear in 1982, when U.S. merchandise exports (in dollar terms) declined for the first time in 25 years. That drop in exports—which in the national accounts translates into the somewhat more complex "net exports of goods and services" (see box)—was the single biggest factor in the decline of U.S. economic activity last year—substantially larger than the drop in housing activity, for instance. Repeated warnings that the decline in exports—which reflected both the stronger dollar and the worldwide recession—may have cost the country up to a full percentage point in annual GNP growth are borne out by the relevant statistics.

As Table 1 shows, over the years the contribution of net exports—the difference between exports and imports of goods and services—has fluctuated considerably. In both 1975 and 1980, an increase in net exports helped moderate the fall in real output. Hence, with the assistance of that increase, overall GNP declined by less than domestic demand alone. Conversely, declines in net exports in 1977 and 1981 had a restraining effect on total output; therefore, domestic demand rose by more than GNP as a whole. For last year, the story is much the same—domestic demand declined 0.7 points less than total GNP.

"When America Sneezes . . ."

This considerable—and, one must assume, generally unsuspected—influence of exports on U.S. economic performance sheds new light on the old debate over the extent to which fluctuations in economic activity in the United States affect activity in the rest of the world and vice versa. For a long time, the popular theory was that when the United States sneezed, Europe caught a cold. That theory implied, in effect, that when the United States economy suffered a recession—accompanied by a reduction in demand, including that for imports—such a reduction was translated into a relatively severe contraction in those countries for which the United States was a major market.

The sneeze hypothesis presumably reflected the notion that because of the size and importance of the United States economy, both absolutely and relative to other economies, anything that happened in the United States necessarily had to affect events abroad. While this may have been true in itself, it did not necessarily mean that cyclical fluctuations in the United States would automatically cause parallel cyclical changes in other countries in any direct way or vice versa. In the late 1970's, Philip Klein, of the University of Pennsylvania, found "little evidence to support the notion that U.S. cyclical developments have a dominant impact on cyclical changes in foreign countries through more or less coincident changes in U.S. imports. In fact, we have found as much or more support for the notion that foreign cyclical changes affect U.S. growth cycles by affecting U.S. exports."[17]

There is, of course, a difference between ordinary and abnormal circumstances. As was pointed out earlier, both the United States and other major industrial countries tend to experience fairly large similarities in cyclical fluctuations when these reflect the impact of

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[17] Philip A. Klein, *Business Cycles in the Postwar World.* Washington, D.C.: American Enterprise Institute for Public Policy Research, 1976, p. 40.

International Transactions and the Domestic Economy: Some Conceptual Problems

The international component of the U.S. national accounts consists of "net exports," that is the *difference* between total exports and total imports of goods and services. Why do only *net* exports enter into the national accounts? Exports clearly are part of domestic production, and hence create employment and income payments to the producers of those exports. Spending on imports, on the other hand, leads neither to domestic employment and production nor to earnings by domestic producers. On the contrary, it represents the substitution of foreign for domestic production and must, therefore, be excluded from GNP. Thus, only the net difference between exports and imports adds to domestic production. It is this net figure (which includes income on investments, except interest payments on government securities) that, for all practical purposes, measures the impact of U.S. international transactions on domestic economic activity.

Serious questions have been raised from time to time as to whether the concept of "net exports" adequately reflects the importance of international transactions to the United States—or to any other economy. For instance, should exports and imports perhaps be recorded separately and, if so, should they be measured in the aggregate or should more detail be provided? Moreover, are goods and services as such an adequate gauge of the impact of international transactions, or should one adopt a broader measure—perhaps one that shows the effect of all international transactions on the domestic money supply? Last, but not least, how are domestic prices and production affected by changes in the prices of imports and exports—that is, in the country's "terms of trade"?

These and related questions have given rise to a careful reexamination of the manner in which the U.S. external accounts—exports of both goods and services—are integrated into calculations of real GNP. Briefly stated, under current procedures export values are deflated by export prices and import values are deflated by import prices. But since the latter have gone up much more rapidly than export prices—largely because of the enormous increase in oil prices during the 1970's—import values are deflated much more than export values. This gives rise to large export surpluses in constant dollars, even though the net export balance in current dollars may be small or even negative. One result of this anomaly is that net exports of goods and services have been carrying more weight, both when they have risen and when they have declined, in real GNP than in current-dollar GNP.

This curious state of affairs has raised the broader question of the extent to which a country's real output, and hence its income, are affected when the same physical quantity of exports no longer buys as large a physical quantity of imports as before (when there is, in technical language, a decline in the terms of trade). To obtain a more accurate picture, it has been suggested that net exports be deflated by an appropriate import-price index (which measures real "command" over imported goods and services), rather than deflating exports and imports separately and then simply computing the difference. Such a series, showing how this country's "command" over goods and services from domestic production has declined as a result of the deterioration in the terms of trade is shown in the accompanying table.

Real GNP and Net Exports, Adjusted for "Command" Over Goods and Services

		Net Exports		*Real GNP*		
	Real GNP	*As shown in GNP*	*Adjusted for "Command" Over Goods and Services*	*Adjusted for "Command" Over Goods and Services*	*Change in Real GNP* *Unadjusted*	*Adjusted*
		(Billions of 1972 Dollars)			(Percent)	
1974	1,248.0	27.8	19.7	1,228.4	−0.6	−1.9
1975	1,233.9	32.2	17.3	1,216.6	−1.1	−1.0
1976	1,300.4	25.4	18.0	1,282.4	+5.4	+5.4
1977	1,371.7	21.9	24.0	1,347.7	+5.5	+5.1
1978	1,436.9	24.6	24.9	1,412.1	+4.7	+4.8
1979	1,483.0	37.7	32.2	1,450.8	+3.2	+2.7
1980	1,474.0	50.6	41.9	1,432.1	−0.6	−1.3
1981	1,502.6	42.0	33.1	1,469.5	+1.9	+2.6
1982	1,476.0	30.9	24.4	1,451.6	−1.8	−1.2

Source: Edward F. Denison, "International Transactions in Measures of the Nation's Production," *Survey of Current Business*, May, 1981; U.S. Department of Commerce.

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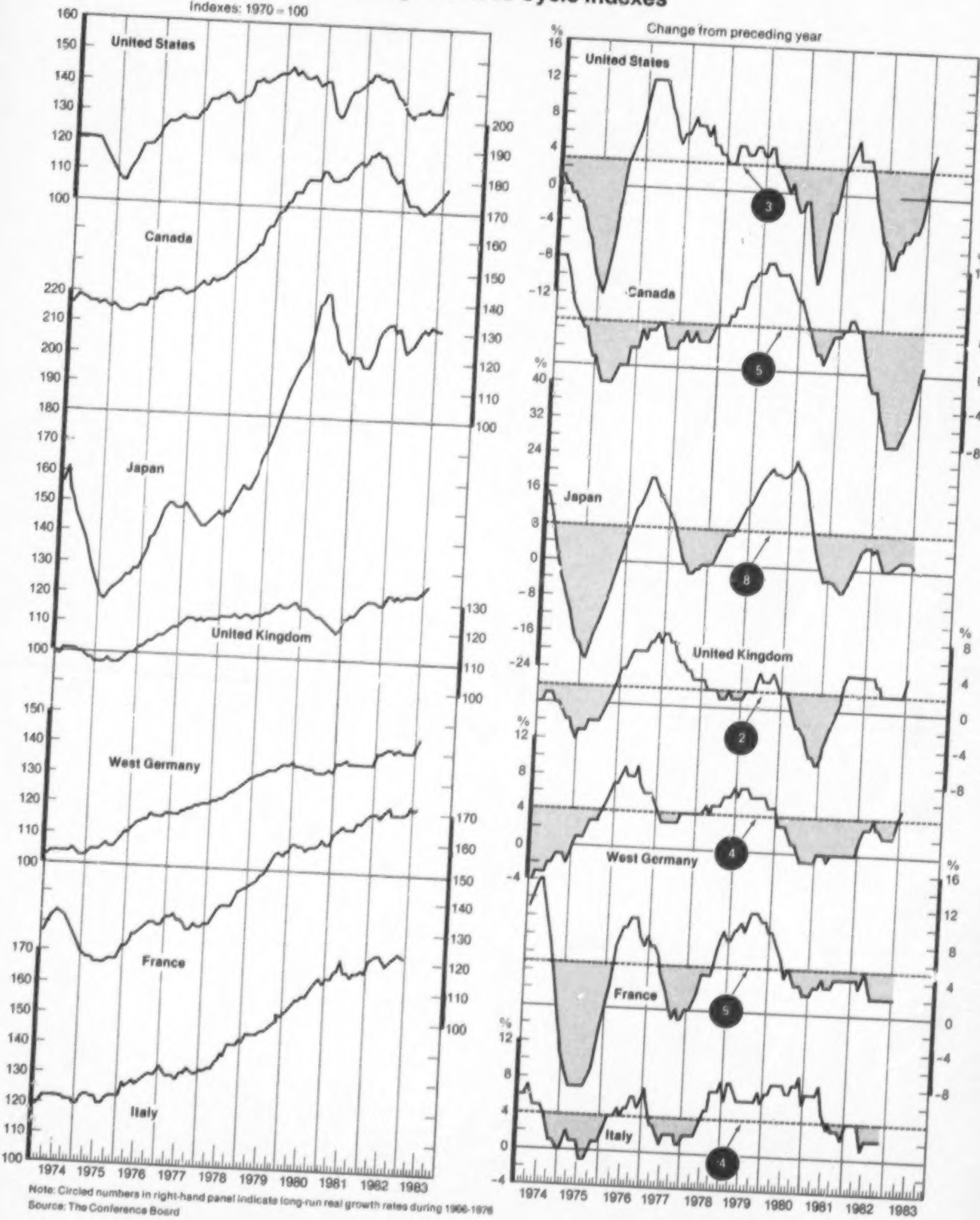
Chart 3

Leading Business Cycle Indexes



Note: Circled numbers in right-hand panel indicate long-run real growth rates during 1966-1976

Source: The Conference Board

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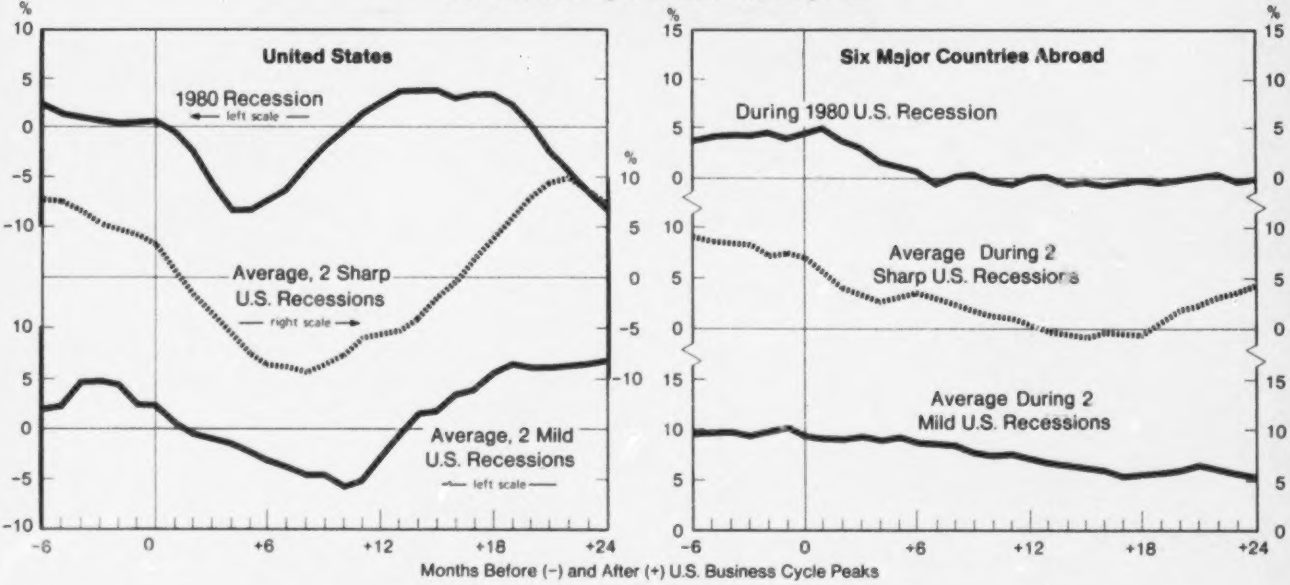
Chart 4

Economic Growth Rates, United States and Major Countries Abroad, During U.S. Business Cycles



Notes: The six countries (right panel) are Canada, Japan, United Kingdom, West Germany, France and Italy. Sharp U.S. recessions took place in 1957-58 and 1973-75; mild U.S. recessions took place in 1960-61 and 1969-70. The growth rates are based upon composite coincident indexes (including output, sales volume, employment and real income) and are percent changes to the current month from the average of the preceding 12 months, expressed at an annual rate.

Source: Center for International Business Cycle Reserch

major exogenous shocks, such as the commodity boom of the early 1970's and the two oil price shocks of that decade. But under "normal" circumstances there is relatively little "synchronization" of fluctuations between the United States and the rest of the industrial world.

That phenomenon is consistent with the relatively small size of the external sector—we are talking about merchandise trade alone—relative to total GNP in the United States. Various studies by the National Bureau of Economic Research, conducted by Geoffrey Moore, have found, moreover, that even though there are common international growth cycles for the major industrial countries, in terms of the degree of association the United States by no means occupies the dominant position.

Monthly trade data for a 15-year period from the late 1950's through the early 1970's, for example, show that U.S. exports to four of its major trading partners grew about six times as fast when those countries were in an expansion phase as when their economies were contracting. U.S. imports from those same four countries, on the other hand, grew only three times as fast during an expansion in economic activity in the United States than during contractions. Thus, the United States could by no means be considered to be the cyclical leader and there is "no support for the popular misconception that the contagion runs in a dominant way from the United States to the other major industrialized nations."[18]

More recently, Moore's work on leading indicators in seven major industrial countries, published bimonthly in The Conference Board's *International Economic Scoreboard,* in a very general way shows only a mild degree of "synchronization" of economic activity between the United States, on the one hand, and Canada, Japan, France, Germany, Italy and the United Kingdom, on the other (see Chart 3). But Moore's investigations have also shown that *sharp* recessions in the United States tend to spill over into other economies, while mild or "normal" ones are much less noticeable in other countries. This is borne out in Chart 4, which is based on the so-called coincident indicators and provides a comparison of the 1980-1981 experience in the United States with previous U.S. recessions that were sharp (1957-1958 and 1973-1975) and milder ones (such as in 1960-1961 and 1969-1970).

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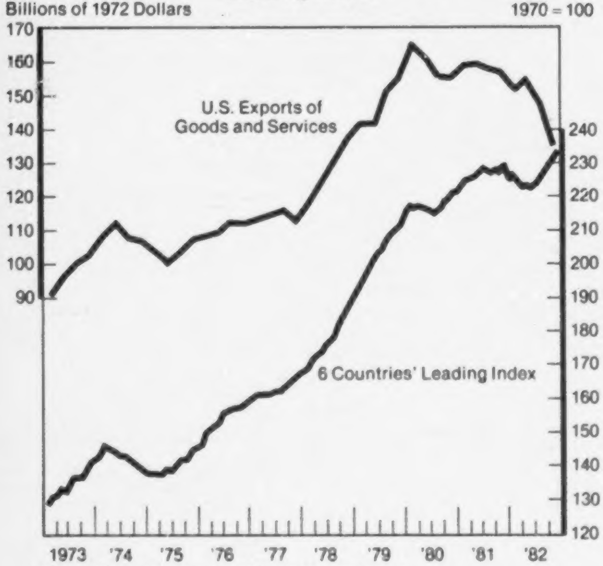
[18] Geoffrey H. Moore and Philip A. Klein, *New International Business Cycle Indicators System: Applying the NBER Indicator Approach to International Growth Cycles.* New York: National Bureau of Economic Research, 1975, mimeographed, p. 29.

Chart 5

United States Exports and an Export-Oriented Leading Index



Source: Center for International Business Cycle Reserch

Moreover, Moore's research also lends support to the contention, spelled out above, that the pace and direction of economic activity abroad exerts a strong impact on U.S. exports. With the help of a specially constructed leading index for the other six countries—that is, one oriented to U.S. exports—he has shown that the general configurations of total U.S. exports (of both goods and services) and of the six-country index are fairly similar—and this despite the fact that about half of U.S. exports go to countries other than the six.[19] The decline and recovery from the 1974-1975 recession are clearly reflected (see Chart 5), as is the slowdown in 1977 and the subsequent acceleration.

The major divergence appears in 1981-1982, when exports dropped appreciably while the six-country index first leveled off and then rose again. This difference can probably be ascribed to the sharp appreciation of the dollar, which made U.S. exports more costly in terms of other currencies.

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[19] In this index, each country is weighted according to the dollar value of its 1972 imports from the United States. In the regular index in the *Scoreboard,* the weights are based on each country's GNP.

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Research Bulletin

number 137

U.S. Regional Outlook 1983-1984

Summary of a February 1983
Meeting of The Conference Board's
Regional Economic Forum

The Conference Board

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The Conference Board's fifth annual regional economic forum met in February, 1983, gathering eight experts from around the country. The Forum's deliberations are summarized in this report.

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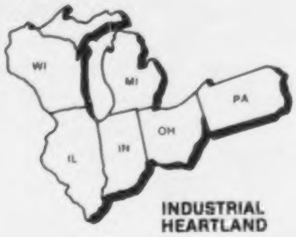
HIGHLIGHTS

New England's recent economic performance has compared even more favorably with the nation's than it did in the 1980 slump. The major difference between the region and the nation in 1981-1982 was the stronger performance in New England of nonmanufacturing industries—especially construction—and of durable goods manufacturing. Recovery in the region will be aided by rising defense spending, but dampened by New England's orientation to the production of capital goods and to export markets.

ME
VT
NH
MA
CT
RI

NEW ENGLAND



INDUSTRIAL HEARTLAND

The outlook for the Industrial Heartland depends heavily on conditions in its major industries, such as steel, motor vehicles, machine tools, agricultural and construction equipment, and electrical machinery. The currently depressed condition of those industries reflects not only the national recession but also a structural shift in the location of production. Consequently, many industries in the Heartland are unlikely to regain their previous peaks even in a national recovery, and much of the region will have to wait many months for an upturn.

New York and New Jersey managed to hold off the effects of the national recession until about a year ago. No region could expect to escape the effects of such a severe recession, but the Mid-Atlantic economy has performed better than the nation at large. There is much underlying strength now in the region, but the Mid-Atlantic outlook depends importantly on economic recovery not only in the United States but also abroad, for the region has become more closely tied to the global economy in recent years.

MID-ATLANTIC

DE
MD
WV
VA
KY
NC
TN
SC
MS
AL
GA
FL

SOUTHEAST

Demand must strengthen not just in national but also in international markets before the Southeast can expect a significant recovery. A construction upturn in 1983 will be a significant plus, for construction is important in the Southeast and the region is also a lumber producer. Other pluses in 1983 will be the furniture, stone-clay-glass, metals and transportation equipment industries; defense-related jobs will also grow briskly. However, slow growth in foreign markets will be a damper on industries producing for export.

A NOTE ABOUT REGIONS

The definitions established by the Census Bureau are probably the most familiar to users of regional data, and they are used here with only one amendment—a different treatment of Pennsylvania. The relationship of The Conference Board Forum's regions to the Census Bureau's regional divisions is as follows: New England = New England; Mid-Atlantic = Middle Atlantic less Pennsylvania; Industrial Heartland = East North Central plus Pennsylvania; Southeast = South Atlantic plus East South Central; Breadbasket = West North Central; Southwest = West South Central; Mountain = Mountain; Pacific = Pacific.

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American farmers are entering a fourth year of financial distress. Solution of current farm problems requires both a rebuilding of demand and an adjustment in supplies, and thus depends on economic recovery here and abroad, the success of acreage-reduction programs, and—as always—the weather. Gradual demand improvement is expected over the next several years, although foreign markets will be slow to recover. With improving demand and reduction of excess stocks, farm income may rise in 1984.

ND
MN
SD
IA
NE
KS
MO

AMERICA'S BREADBASKET

SOUTHWEST

The recession finally hit the Southwest in 1982, although unemployment rates in the region remain below the national average. The Southwest's outlook hinges in large part on the nation's, and national recovery will have a positive effect on the region's centers of defense, high-tech and financial industry; it will also help agriculture. However, the Southwest remains highly dependent on energy exploration and production, and the "oil patch" will remain in recession in 1983. Gulf Coast industrial areas will also remain weak, and the Mexican border economy is in very bad shape.

The 1981-1982 slowdown in the Mountain region was less severe than in many other areas, but the shift from late 1970's boom was very noticeable and not without pain. Deflation of the energy boom was a major factor, but the effects of the national recession were more pervasive. National recovery, and lower interest rates, will boost construction, manufacturing, services and tourism, but mining and agriculture will take longer to recover and declining oil prices could dampen the region's large oil and gas industry.

MT
ID
WY
NE
UT
CO
AZ
NM

MOUNTAIN STATES

AK
WA
OR
CA
HI

PACIFIC

The Pacific outlook is cautiously optimistic. Defense orders and reviving commercial airline activity should gradually restore jobs in the regionally important aerospace industry, with growth accelerating in 1984. California, Oregon and Washington will be helped by the home-building recovery now under way. Alaska's economic health is vulnerable to a further drop in oil prices, and Hawaii's agriculture is facing difficulties. However, the Pacific region should enjoy growth in jobs and income somewhat faster than the national average in 1983 and 1984.

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Some Recovery At Hand—An Overview

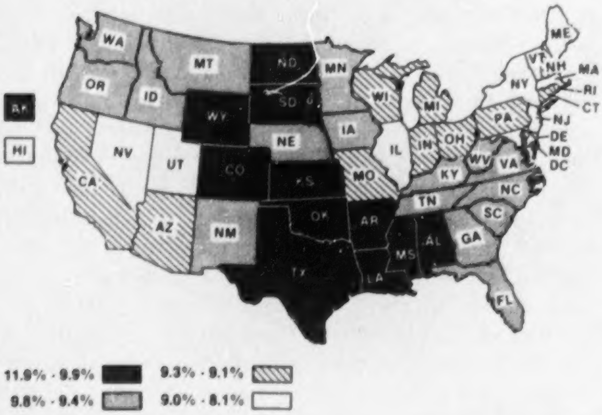
Lora S. Collins
The Conference Board

Lora S. Collins

DISCUSSION at the Spring, 1983, meeting of The Conference Board's Regional Economic Forum confirmed the view expressed a year earlier that every region of the country, and virtually every industry, has been palpably affected by the slump of the 1980's. Despite the considerable differences among regions, national economic conditions are the single most important influence on any region's economy, and for this reason no region is truly recession-proof. In short and mild recessions, however, fast-growing regions have sometimes taken little notice of the recession-induced slowdown in their growth. But the slump of the 1980's has been neither short nor mild. It has been characterized by fairly severe readings on all three criteria of recession—depth, duration, diffusion—and its impact has consequently been pervasive. Although the business cycle chronology of the National Bureau of Economic Research identifies a short recession in 1980 followed by a short recovery to mid-1981, the economy has, in effect, been in recession for the past three years. The reason is that national economic policy has been determined to wring inflation out of the system despite the associated pain. As the 1982 Regional Economic Forum noted, this proved to be not a blitzkrieg but a war of attrition.

Much the same thing has been happening abroad, making the early 1980's period of worldwide disinflation entailing conscious repression of economic activity. This has made for a considerably harsher environment than that of the typical postwar business cycle downturn; the usually cyclical industries have been hit with more than typical severity, while the impact on the rest of the economy has also been unusually sharp. Forum participants noted that the slump—domestic and worldwide—had contributed significantly to deflating the oil boom, to weakening the markets for agricultural output, and generally to eroding foreign markets for U.S. goods.

Average Annual Growth of Per Capita Personal Income, 1970-1981



Industry Composition of Regional Economic Growth, 1971-1981
Percent breakdown of the total change in earned income

				Manufacturing		*Finance, Insurance, Real Estate*		*Trade, Services, Transport, Utilities*
	Farm	*Construction*	*Mining*	*Durables*	*Non-durables*		*Government*	
New England	0.4	2.8	0.1	25.4	8.0	6.8	12.4	44.1
Industrial Heartland	1.1	3.7	1.3	25.4	8.7	5.5	12.5	41.8
Mid-Atlantic	0.4	2.1	0.2	13.5	9.5	9.8	14.7	49.8
Southeast	0.7	5.0	1.8	11.8	12.1	6.0	20.2	42.4
Breadbasket	2.8	5.1	1.8	15.5	8.8	5.9	14.3	45.8
Southwest	0.8	8.2	10.2	12.7	7.9	5.0	12.7	42.5
Mountains	0.7	7.8	7.8	11.4	3.9	5.3	17.2	45.9
Pacific	1.9	6.0	0.9	16.8	6.0	6.6	15.8	46.0
United States	1.3	5.1	2.7	16.7	8.4	6.1	15.3	44.4

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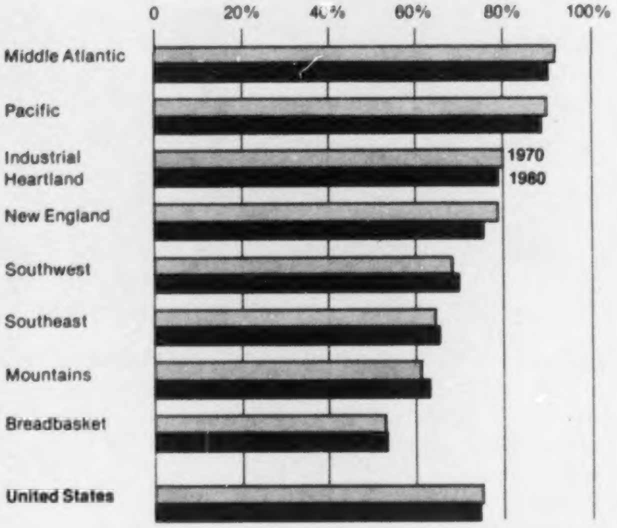
Percent of Population Living in Metropolitan Areas, 1970 and 1980



Also, the high exchange value of the dollar is, at least in part, an offshoot of the past three years' anti-inflationary monetary policy, and the high exchange rates have significantly curbed U.S. exports while attracting foreign goods into U.S. markets. A striking element in the regional experts' reports is their unanimity over the importance of the rest of the world—as a market, a competitor, and a debtor.

Although the 1983 Forum touched on many of the same themes discussed a year earlier, the general attitude this year was hopeful whereas in 1982 it was bleak. The Forum participants were confident that 1983 will be a year of economic growth, because of the Federal Reserve's manifest shift last year to a policy of facilitating and supporting growth. While hopeful, however, the Forum was subdued. For one thing, the participants expect only a modest rate of growth this year (a 2½ to 3½ percent rise in real GNP from 1982 to 1983).

In addition, they are worried about the fragility of financial markets domestically and worldwide, and they are unsure about what really to believe about economic policy—and thus about prospects beyond 1983. There was a definite sense among the Forum participants that a truly significant change has occurred in the U.S. economy, away from persistent inflation and, perhaps, toward better economic growth. But this was far from a firm conviction, and the group worried that the realistic thing might be to expect yet another round of inflationary boom followed by anti-inflationary slump. In sum, the participants were reasonably optimistic about the very near term but uncertain and uneasy about the longer term policy path.

There was a good deal of discussion at the Forum meeting about "structural change." The disinflation of the early 1980's, if permanent, is a structural change of considerable significance with many ramifications yet to unfold. There was, of course, talk about the structural changes in costs and technology that are shifting old-line durable goods industries away from the Industrial Heartland and from the United States altogether. It was also noted that the mining industry, especially its non-petroleum segments, is similarly going through a period of structural change that is shifting activity to other parts of the world, and that structural changes in agriculture are making it more similar to the rest of the economy and less likely to march to its own tune. Two elements in the Forum's discussion of structural change are worth noting. One is that it is always occurring, in one part of the economy or another, because neither technology nor relative costs stand still. Although structural change may seem unprecedented and unique to those who are directly affected, the process really is an old story. The other point is that we have generally not tried to block structural change in the United States and, therefore, it happens very quickly here. The Forum participants felt that this is a positive element in the U.S. economy, one that makes for flexible and efficient use of resources. They reiterated the sentiments of past Forum meetings, in opposition to protecting industries—or regions—from the change associated with a dynamic economy.

New England

Katharine L. Bradbury
Federal Reserve Bank of Boston

Katharine L. Bradbury

The 1981-1982 recession has fallen much more heavily on New England than did the 1980 downturn. Yet New England's economic performance compares even more favorably with the nation's than it did in 1980. In the 1980 recession, the peak-to-trough decline in employment was just under 1 percent in New England, just over 1 percent in the nation. From the peak in July, 1981, to December, 1982, employment fell 2 percent in New England and 3 percent in the nation.

The major difference between the region and the nation, particularly in recent months but also over the entire course of the 1981-1982 recession, is the stronger performance of New England's nonmanufacturing sector. The service industries accounted for most of the region's increase in nonmanufacturing jobs, but the industry in which New England's experience differed most markedly from that of the nation was not services but construction. Construction employment in New England in late 1982 was about 4 percent ahead of construction employment around the pre-recession peak, while national construction employment was 9 percent lower than at the pre-recession peak.

The other sector in which New England's performance has been superior to that of the nation is durable goods manufacturing. The difference here is due in part to the strong performance of individual New England industries, and in part to industry mix. However, while employment has fallen less in New England than in the nation, the present situation bears little resemblance to conditions in the 1980 recession, when durable goods employment fell only 1½ percent in New England, compared with 6½ percent nationwide. In contrast, from the cyclical peak in July, 1981, to November, 1982, durable goods employment fell 10 percent in New England and 14 percent in the nation. New England's rate of decline has been about two-thirds of the nation's throughout the recession.

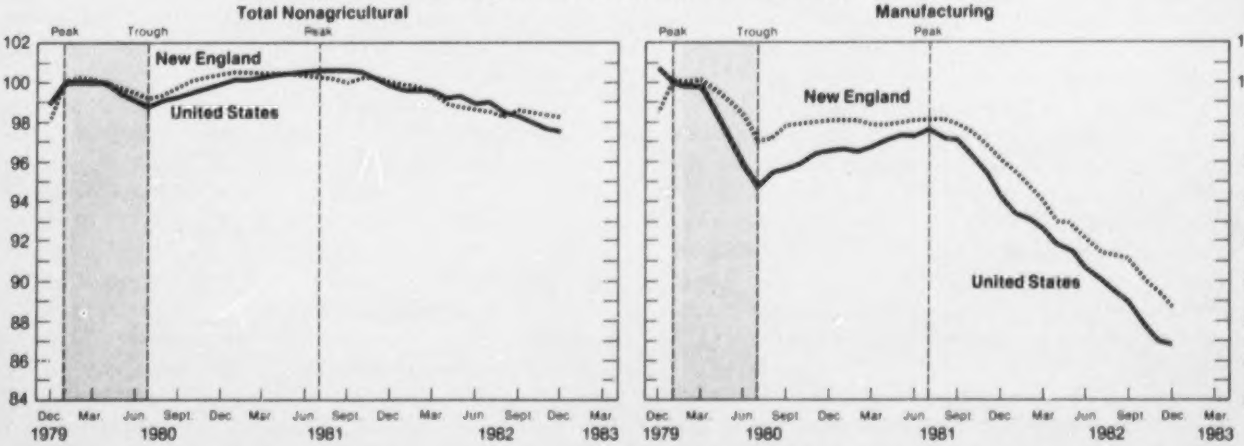
The New England durable goods industries that have suffered the greatest employment losses are primary metals, instruments and fabricated metals. The New England durable goods industries with the smallest declines in employment are electrical and electronic equipment—consistent with national experience. However, the New England decline in transportation equipment jobs was smaller than that nationally, even after taking into account that transportation equipment in New England is dominated by aircraft and shipbuilding rather than automobiles. New England's relative strength in transportation equipment, and also in electrical equipment, may be attributable to defense spending. For the most part, the decline in New England's durable goods industries appears to be cyclical rather than secular in nature, and there is little reason to believe that employment in this sector will not recover fully in the national upturn.

Not so for nondurable goods manufacturing. New England's textile industry and, to a lesser extent, other traditional nondurable goods industries have not been able to compete successfully with industries abroad and in the southern states. Time and again, employment has fallen sharply in recessions and made only a partial recovery in the ensuing expansions. This pattern shows signs of repeating itself. Nondurable goods employment in New England (of which textiles makes up about 10 percent) in late 1982 was 9 percent below the level at the July, 1981, cyclical peak and 12 percent below the peak before the 1980 recession.

New England's economic performance compares even more favorably with the nation's when one looks at unemployment rates rather than changes in employment. In December, 1982, the unemployment rate in New England was 7.7 percent—three points below the national rate of 10.8 percent. What makes these figures remarkable is that in the 1975 recession, the unemployment rate was highest in New England of all the major regions, and in 1977, in the middle of an expansion, New England's unemployment rate was the same as it was in late 1982.

Several aspects of the New England economy make it

Employment in New England and the Nation -- Indexes: January 1980 = 100



likely that the region will do no worse than the national economy during the expected national economic recovery, but the region's upturn will be less sharp, more u-shaped. This is partly because the downturn in New England has not been as severe as nationally in most industries. But it also depends on the interplay of several important sectors in New England: defense, exports and investment goods. Defense continues to be a steady source of employment strength in New England. Nationally, defense spending is expected to grow over 5 percent annually in real terms over the next several years, which will be faster than the rest of the economy. New England receives about 12 percent of the nation's prime defense contracts, although it has only 7 percent of the nation's manufacturing employment, and only 5½ percent of the nation's population.

In contrast, New England's manufacturing orientation to capital goods will not work to the region's advantage in this recovery. Investment spending typically lags the economy's upturn, and given the slow and uncertain nature of this recovery and continued higher-than-usual interest rates, the lag may be greater than usual. New England producers export an above-average fraction of their output; this is another factor in the expectation of a more gradual recovery in the region than in the nation. Although the dollar is expected to weaken gradually as the trade imbalance worsens and as U.S. interest rates come down, U.S. producers will still be at an international disadvantage. In addition, most analysts believe the United States must lead international markets out of the recession. This will be especially true for New England exports, which are mostly capital goods.

For all these reasons, it seems likely that New England will see some recovery as the nation does, but that the regional recovery will start more gradually. Even though it may follow a u-shape, there is no reason to believe that this recovery will not, overall, put New England in as strong a position as the nation over the next two years.

"The Industrial Heartland"

Wynn V. Bussmann
TRW

Wynn V. Bussman

The outlook for the Industrial Heartland is largely influenced by the future of some of the individual industries concentrated around the Great Lakes: steel, motor vehicles, machine tools, agricultural and construction equipment, and electrical machinery. The current depressed economic conditions in those industries are the result of two principal forces at work: the general economic cycle and a structural shift in the location of efficient production. Each of these forces will have a significant impact on the future of the industries and the region.

In a strict technical sense, the U.S. economy has experienced two recessions in the last three years. However, in a broader sense, the economy in general and many of the manufacturing industries concentrated in the Industrial Heartland in particular have been in one long slump since 1978. For example, production of cars in the United States peaked at 9.2 million units in 1978 and fell steadily to 5.7 million units in 1982. The production of iron and steel fell from 113.5 percent of its 1967 average in 1978 to 62.4 percent last year. And, were it not for an increase in 1981 in the production of office and service equipment, the production of nonelectrical machinery would have declined steadily from its peak in 1979 through 1982.

The tight anti-inflationary monetary policy begun by the Federal Reserve in 1979, and concentrated in 1981, is a prime reason for the length and severity of the economic downturn. The tight money policies not only produced a direct dampening of demand in the United States but also, by raising interest rates to record-high levels, strengthened the value of the dollar, thus giving imported goods a price advantage over their domestic substitutes.

This price advantage to imports occurred on top of a structural shift in production costs that had been building up over many years. It used to be that low foreign wage rates were largely offset by higher productivity levels here, allowing most U.S.-made industrial products to compete effectively with imports. However, as higher productivity growth relative to wage inflation occurred overseas—particularly in the Pacific Basin countries—and the reverse forces were at work domestically, high-quality foreign goods came to be more attractively priced. This price advantage resulted in significant gains in import penetration in industries like autos, steel and machinery—all industries whose bases of manufacture are in the Industrial Heartland.

The same process was occurring among regions in the United States, as many industries followed furniture and textiles to the lower wage areas of the south and southwest. The shift of manufacturing jobs out of one region into another was reflected in slower population growth in the East North Central states than in the rest of the country, as shown in the following table.

Percent Change in Population

	1960-1970	1970-1980
U.S. Total	13.4	11.4
East North Central States	11.1	3.4
Southern States	15.1	21.6

This process was accelerated in the last half of the 1970's by the large increase in the price of oil in 1974. The quintupling of the price of oil within a two-year period made much of the existing stock of manufacturing capital concentrated in the Heartland economically obsolete. The 1979-1980 increase sank the final nails into the coffins of many plants in the area.

As a result of all of these forces, the economic recovery, when it comes, is unlikely to return many of the industries in the Industrial Heartland to their previous peak levels of employment or output. Furthermore, if interest rates remain relatively high, then the economic recovery is likely to be less robust, though perhaps more sustainable, than prior recoveries have been.

Even with a strong economic upturn and a drop in the value of the dollar, the fundamental economic forces leading to declining importance of these industries in the United States and in the Industrial Heartland will not be denied. The hope for the region seems to lie in participating in industries for which the long-term outlook is brighter. Services, electronics, robotics and other new-technology industries have already become more important factors in the region. For example, services comprised 16.6 percent of total employment in the Cleveland SMSA in 1967 and are estimated to have grown to more than 25 percent last year. This increase in the importance of services employment was greater than that in the nation as a whole. Because of the secular decline of many of the region's traditional manufacturing industries, this trend is likely to continue.

Our current forecast is that production of cars in North America will rise from 5.9 million units in 1982 to 6.5 million this year, with production of total vehicles reaching 9.0 million. If consumers use some of the estimated $500 billion increase in their net worth that occurred in the last half of 1982 to purchase cars and houses, then the recovery will undoubtedly be more robust. However, we are assuming that most consumers will be content to sit on their higher asset values so as to rebuild the wealth that was depleted during the past several years.

Investment in plant and equipment is being held back by low capacity utilization and high interest rates. We expect that fixed nonresidential investment will decline by 6.0 percent this year. However, the investment picture for the industries in the Heartland is even bleaker than that. Part of what is keeping total business fixed investment from falling even more is increases in the areas of communications equipment, computers and other electronics, and miscellaneous instruments. Thus, even though the U.S. economy may well see an economic recovery begin early in 1983, much of the Heartland will have to wait until later in the year, or even 1984, to feel its effects.

The Mid-Atlantic

Rosemary Scanlon
Port Authority of New York and New Jersey

Rosemary Scanlon

Both New York and New Jersey managed to hold off the effects of the current national recession until the second quarter of 1982, when declines in manufacturing job levels finally began to outweigh continued gains in the region's service and finance sectors. As a consequence, total job levels began to edge down. Unemployment levels, too, edged up over the year, but 1982 ended with the unemployment rate in each state lower than the national average, and the key construction sector registered positive gains in contrast to the relatively flat national trend. Total personal income in each state increased by 10 percent. What is more, the first population estimates for the 1980's indicate a sharp reversal of the downward trends that prevailed through the 1970's, and population actually grew by a small margin in 1981.

Although no region can expect to ward off for long the effects of such a severe recession, what distinguishes the Mid-Atlantic states at this stage is that their economic performance is in line with the entire northeast, and relatively better than the rest of the nation. This is certainly an improved situation from the severe economic decline in the Mid-Atlantic during the first half of the 1970's.

Total employment in New York State fell by 8,000, or 0.1 percent, in 1982. In New Jersey, the total was off 17,700, or 0.6 percent. In both cases, the rate of job loss was considerably less than the U.S. decline of 1.6 percent during the year.

In New York State, manufacturing employment fell 52,300 in 1982, a 3.6 percent decline, but nonmanufacturing, primarily the service and finance sectors, added 44,000 jobs, in contrast to the declines that engulfed even nonmanufacturing in the rest of the country. Most of the state's economic strength came from New York City and its surrounding metropolitan counties; they were still registering job gains, although at a reduced rate of 0.2 percent, late in 1982. Here the primary thrust was from the service and finance sectors, both of which were still registering growth at the beginning of the fourth quarter.

In New Jersey, the drop in manufacturing employment has been relatively more severe; 43,700 industrial jobs were lost in 1982, a decline of 5.6 percent, close to the 6.5 percent drop nationally. Although jobs in New Jersey's nonmanufacturing sector continued to increase, rising by 26,000 or 1.1 percent, these gains were more than offset by the manufacturing decline. The latter was particularly severe in the primary metals, machinery, transportation equipment (primarily auto assembly), stone-glass-cement, and textile industries.

As the job picture weakened, the unemployment rate in New York State increased from 7.6 percent in 1981 to 8.6 percent in 1982. In New Jersey, the rise was sharper, from 7.3 percent in 1981 to 9.0 percent in 1982. However, both states registered lower rates than the national average of 9.7 percent for the year. The unemployment situation varied dramatically within each state: Several older urbanized areas experienced rates as high as 13.6 percent, but the New York City suburbs recorded a rate of 5.9 percent, almost a record performance compared with the rest of the nation.

Construction activity has remained surprisingly strong in both states: In New York, the dollar volume of contract construction increased by 9.5 percent in 1982; in New Jersey, it rose by 6.2 percent. For comparison, the U.S. total edged up by only 0.7 percent, making for a decline in real terms. Nonbuilding, or infrastructure, construction was particularly strong in upstate New York, and both states registered gains in residential construction, which dropped 3.5 percent in dollar volume in the nation at large. New York City office and hotel building remained firm during the year, although vacancy rates in new office space have edged up slightly and asked rental rates have eased in recent months.

The relatively sturdy economic performance resulted in increases of 10 percent in total personal income in both New York and New Jersey in 1982, contrasted to a 9 percent increase nationally (using data through the third quarter).

Despite a reported decline in the flow of foreign direct investment to the United States, the number of foreign manufacturing investments in the New York-New Jersey metropolitan area continued to grow in 1982. Data on foreign investments in real estate during the past year are not yet available. However, indicative of the strong international business and visitor market, the number of overseas commercial air passengers traveling through the region's three major airports increased by almost 3 percent over 1981. On the debit side, the tonnage of ocean-borne general cargo exports declined by 17.4 percent through the first nine months of 1982, and air cargo exports fell by 12.6 percent. Imports of both ocean-borne and air cargo gained slightly.

Population levels posted a slight increase in the New York metropolitan region during 1981, in sharp reversal to the population decline throughout the 1970's. Although the gain was small, it must be contrasted with an average annual decline of 0.6 percent between 1970 and 1980. All counties in the 17-county metro area registered slight increases, with the exception of Kings (Brooklyn) and Essex (Newark and vicinity) counties.

The Mid-Atlantic outlook for 1983 depends importantly on economic recovery both in the United States and in the rest of the world; the region's economy has become more closely tied to the global economy in recent years. Business services and finance should continue to register gains, but at reduced growth rates from last year, and the prospects are good for some recovery in residential construction and retail sales. Unemployment rates may ease somewhat, but will still be high in comparison with 1979 and 1980. There is much underlying strength now in the Mid-Atlantic economy, which has also been helped by reduced inflation and the prospects for relatively low inflation (approximately 5 percent) continuing in 1983. But a sluggish world recovery, combined with the strong dollar, could dampen this moderately optimistic outlook.

The Southeast

Donald L. Koch
Federal Reserve Bank of Atlanta

Donald L. Koch

Southeastern states entered 1983 generally positioned to profit from even a cautious national recovery. Most of the Southeast's products depend upon national and even international markets, so demand at those levels must strengthen before the region can expect a significant upturn. Florida and Georgia should continue to outperform the nation as well as other states in the region this year. The economies of Alabama, Mississippi and Tenessee will depend importantly on the strength of the rebound in the interest-sensitive auto and housing industries. South Carolina's recovery will hinge on the strength of consumer spending. Louisiana, heavily dependent on the oil and gas industries, should recover slowly until energy prices firm.

The service-producing sector has held up well throughout the 1981-1982 recession. However, state and local governments are under severe budgetary constraints that may force continuing cutbacks in expenditures and employment in 1983. Residential building permits began to increase at mid-1982, and actual construction began a slight upturn in the Fall. Construction and related industries are major components of the southeastern economy, and southeastern lumbering industries supply an important piece of the nation's requirements. A construction revival typically is felt rather quickly in the Southeast; with further declines in interest rates, the construction industry should provide renewed strength to the southeastern economy this Spring. Also, consumers are likely to accelerate spending. These improvements, combined with anticipated growth in tourism, should move the Southeast to recovery in earnest by the second half of 1983. Tourism activity will be led by travelers headed for Walt Disney World's new Experimental Prototype Community of Tomorrow (EPCOT) in central Florida, but business should pick up throughout the region as incomes increase. The Southeast's financial institutions are also well-positioned to join in recovery.

Alabama, Tennessee and Mississippi in early 1983 had unemployment rates well above the national average, while Louisiana's was slightly above. Among area states, only Florida and Georgia could boast unemployment rates lower than the nation's.

In manufacturing, much of the region's employment weakness has been in durable goods, although important regional nondurables industries such as food and kindred products, textiles and apparel, paper and chemicals have also fared poorly. In 1983, lumber and wood products will gain strength as will furniture, stone-clay-glass, primary and fabricated metals, and transportation equipment. Their pace of recovery will be determined in large measure by consumers' willingness to purchase housing and autos. Defense-related production jobs will grow at a healthy clip, particularly in the electronics and transportation equipment industries.

Slow-growing European, Canadian and Japanese economies may limit the growth of southeastern industries that produce for export. Mining also should expand slowly as coal exports level off, or drop slightly, from 1982. In fact, the entire Southeast will experience slow international trade growth through its ports because of the expected moderate rate of worldwide recovery. The region may even lose some of its trade share because its ports are linked closely to financially troubled countries of Latin America.

Georgia's economy entered 1983 in relatively good condition. Service-producing industries, which are especially important in Atlanta, have proved recession resistent and should continue to provide strength in coming months. Nonresidential construction has held up better than residential during most of the recession, but the reverse is likely to be true in the recovery of 1983. Altanta's office-building market enters 1983 glutted. Georgia's manufacturing is heavily dependent on the recession-prone textile and apparel industries, where recovery threatens to be a prolonged process since demand is dependent on the slowly recovering housing and auto industries. Textiles and apparel will face continued import competition, while the high foreign exchange rate of the dollar will limit exports. Farmers are gradually paying off debts accumulated during droughts in 1977, 1978, 1980, and 1981. Soybean, wheat, cotton and corn producers should have a tough time this year, with 1982 crop surpluses continuing to exert downward pressure on prices. Tobacco and peanut producers should fare moderately well.

Alabama seems likely to recover from the recession later than neighboring states. The state's relatively high concentration in interest rate-sensitive durables manufacturing makes it more susceptible to national downturns than other states and slower to recover. Another critical factor is the dollar's foreign-exchange rate. A high exchange rate has reduced foreign demand for products from Alabama—coal, steel, farm products, and industrial chemicals—and encouraged U.S. companies to substitute foreign-made capital goods for domestic ones such as are made in Alabama. Demand for exports should revive this year, but slowly. World economic conditions will also be an important determinant of energy demand. A moderate energy recovery appears likely and Alabama coal fields, oil and gas production, and the Mobile docks should all benefit.

In *Florida*, early signs of stronger activity are appearing. The decline in residential construction seems to have halted, although homebuilding remains dependent on inmigration, which dropped sharply in 1982. Population growth in 1983 should surpass last year's 200,000, but still be relatively slow compared with 1978-1981. After no growth in 1981 and 1982, tourism should pick up in 1983. EPCOT will play a significant role in bringing new visitors to the state, and Miami officials say the city's tourism should recover from a dismal year in 1982. Foreigners, who contribute significantly to Miami's tourist trade, found a Florida vacation costly last year because of the dollar's high exchange rate. Whether foreign tourism picks up will depend to a great extent on the value of the dollar and on world economic recovery. International trade and finance will be affected by those same factors. A relatively strong dollar, though bad news for Florida tourism, should encourage import value. Phosphate export shipments are starting to pick up, but exports to Latin countries should remain weak. International banking and finance have contributed to a boom in office construction and redevelopment of Miami's downtown district. Continued development of international finance in 1983 could help transform Miami from a struggling tourist resort to a thriving international city.

The oil and gas industries and international trade propelled *Louisiana's* economy through national recessions in 1973-1975 and 1980 with minimal damage. Not so in 1981-1982, as oil boom turned to oil bust and volume stalled at Louisiana's ports. In 1983, Louisiana's economy is likely to revive at a slower pace than that of the nation. The faster and stronger the recovery worldwide, the more likely that Louisiana's economy will revive quickly. National and international growth are fueled by products from Louisiana's energy sector, while much of the output of the U.S. and world economies is exchanged through the state's ports.

The general outlook for *Mississippi* in 1983 is for moderate economic growth, probably gradual during the first half of the year and speeding up toward the year's end. The unemployment rate should improve slowly, and will remain above the national average for most, if not all, of the year. Industries most important to the state—apparel, machinery, food and transportation equipment—should respond relatively quickly if interest rates continue to fall and consumption rises. Lumber and other construction-related firms will benefit in 1983 from an increase in residential construction. For farmers, 1982 turned out to be the third consecutive year of low net farm income. For 1983, little improvement seems likely, although net income should rise. Mississippi's ports and inland river commerce have suffered from the worldwide recession and the strong dollar, but business should improve this year. The oil and gas industry fell on hard times during 1982. Moderate growth should occur in 1983, although price uncertainties and tax concerns threaten to keep drilling activity from rebounding strongly.

Nationwide recovery in construction is the key to improvement in *Tennessee's* economy because many of the state's industries are tied to construction. Transportation-related manufacturing may also show improvement in 1983. A significant development will be the opening of a Nissan truck assembly plant near Nashville. Beyond its local economic impact, the facility's high-technology nature may mark the beginning of a restructuring of Tennessee manufacturing. Proximity to the University of Tennessee, the Tennessee Valley Authority (TVA), and Oak Ridge National Laboratories makes eastern Tennessee a likely location for high-tech firms, but the depressed outlook for capital spending nationally diminishes the probability of major high-tech developments this year. Outside manufacturing, one of the weakest sectors is government; the state faces a budget shortfall that will exacerbate the effect of federal budget cuts. Services and trade are likely to fare worse in 1983 than in 1982. Changing patterns of energy use indicate a long-term deceleration in the state's important energy sector. Demand for tobacco, one of Tennessee's major cash crops, is likely to be depressed by recession and a 200 percent increase in the federal excise tax on cigarettes. International economic conditions also bode ill for most other crops; for other Tennessee exports such as chemicals; and for textiles and apparel products, which are sensitive to competition from foreign imports.

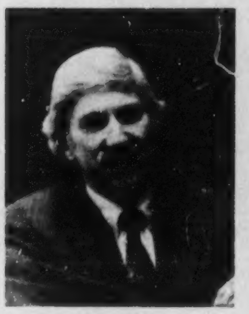
"America's Breadbasket"

J. Dawson Ahalt
U.S. Department of Agriculture

American farmers are entering a fourth year of financial distress. Last year, net farm income dropped one-fifth, to an estimated $20.4 billion. Farm debt increased sharply, while declining land values reduced farm assets. A number of farmers reached their debt limit and a few went bankrupt. Prospects for improvement during the next several years hinge on economic recovery, both domestic and worldwide; the effect of weather on global crop production; and the success of the payment-in-kind (PIK) program and other acreage-reduction programs in cutting supplies of farm products.

Through the 1970's, a buoyant world economy and a weak U.S. dollar accelerated demand for farm products. The world's farmers responded, shifting output into high gear. U.S. farmers were especially responsive, aided by a favorable investment climate, new technology, and rising price supports. During the early 1980's, with nearly every country in recession, demand for farm commodities such as wheat, coarse grains, and cotton has stagnated. Yet many financially strapped farmers find it tough to cut output. Remarkably good weather for two years running has accented this tendency, driving world farm output to new peaks. Except for the United States, food exporting nations have been reluctant to make needed supply adjustments. The problem has been compounded by moves toward more protectionism by many nations. Stocks of unsold commodities loom ominously not only over today's markets, but tomorrow's. As large stocks are carried forward, they will add to next year's supplies. This increases the pressure for programs to curb this year's production. Solution of current farm problems must come from a rebuilding of demand through economic recovery, coupled with necessary adjustments in supplies.

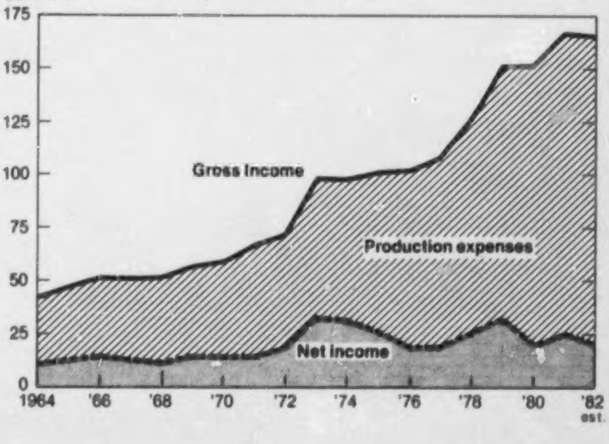
We expect a gradual revitalization of demand for U.S. farm products during the next several years. As U.S. economic activity recovers this year, domestic demand will begin to pick up, especially for livestock foods. Foreign demand for U.S. farm products will recover more slowly. Farm exports dropped from nearly $44 billion in fiscal year 1981 to $39 billion last year, and are likely to decline further this year. Excellent weather has reduced import needs in many countries, and most nations remain in recession. Although OECD countries will begin to recover from recession this year, recovery in developing countries will lag. But even as recovery happens, food import demand will continue to be dampened by high unemployment in industrial nations and by foreign-exchange problems in many Third World and centrally planned countries. Last year, a strong dollar made our exports less competitive. Recently, the dollar's value has dropped slightly against major currencies, but not against those of developing countries.


J. Dawson Ahalt

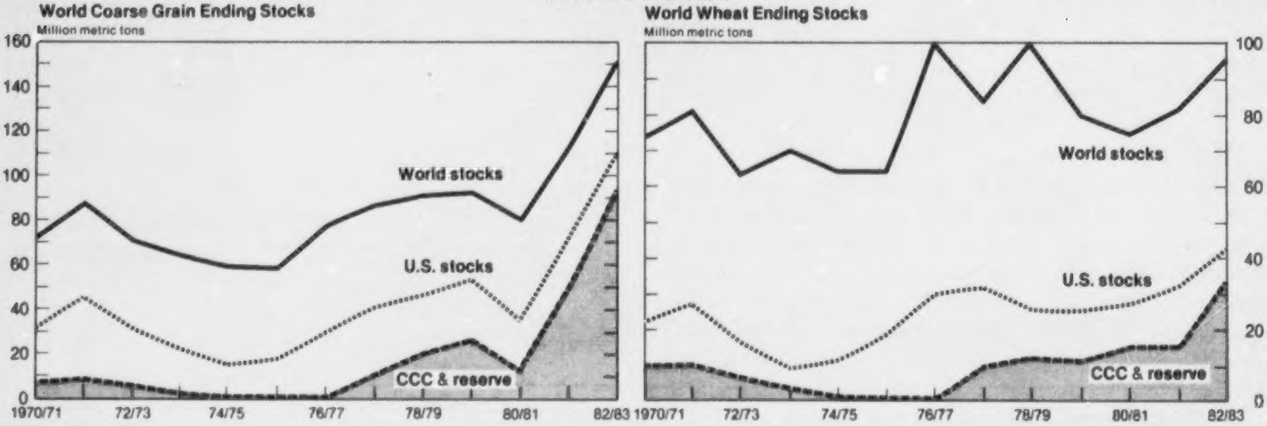
World farm production was elevated last year. Grain production surpassed the 1.5-billion-ton mark, oilseed output jumped sharply, another huge sugar crop was harvested, and foreign cotton output set a record. Much of this added production will add to stocks, especially in the United States. At the end of this crop year, we may hold about 60 percent of world grain stocks, which stand at their highest point in relation to global use in more than a decade. Our stocks of rice, feed grains, and cotton this summer will be about triple those of two years earlier; our wheat stocks up by half; and soybean stocks up by a fourth. These levels depress prices.

In order to qualify for 1983 farm-program benefits, farmers must set aside a portion of their crop acreage, and they can divert an additional portion for a cash payment. The new PIK program offers them the option of setting aside more land—or even their crop-land base—in return for a payment in kind at harvest. In effect, farmers can be assured a yield from the PIK acres with little or no out-of-pocket cost. It appears that a substantial proportion of farmers plan to participate in the PIK program. The effect could be dramatic. Harvested acreage of the five covered crops could drop 23

Aggregate Farm Income



World Grain Stocks



million acres because of PIK alone; harvested acreage of all food and feed grains, soybeans and cotton could drop by about 35 million acres—or by 13 percent. Depending on yields, this could cut 1983 crop production sharply.

PIK's second effect would be to reduce mid-1984 ending stocks of wheat, corn and grain sorghum by a total of 600 million bushels, or 11 percent, from this year's level. These stocks previously were expected to rise. Cotton and rice stocks also would drop. It may take a second year of PIK to liquidate burdensome stocks. However, the program is seen only as a transitional measure. Because stocks will remain quite large, PIK's impact on farm prices over the next year may be limited. However, it could substantially reduce farmers' input costs.

The sharp expected acreage cut in store for 1983 will be a short-term hardship for depressed farm input industries. Fertilizer, pesticide and seed purchases could decline sharply; but farm equipment purchases, linked more to net returns than to plantings, may not be affected much. In 1984 and beyond, farmers' sounder financial footing should bolster input sales.

With low farm prices, government price-support activities may hit an unprecedented $18 billion this fiscal year. PIK helps here, too, by cutting projected government outlays by $3 to $4 billion over the next two years. However, by subsidizing farm exports, other nations are forestalling their share of the production adjustments. The United States continues to press for freer trade, but with meager results. To offset markets lost to subsidies, the President has authorized nearly $3 billion in blended export credits. Also, we are using government wheat stocks to assist a sale of wheat flour to Egypt. These moves demonstrate U.S. determination to pursue export markets aggressively.

While it is too soon to predict 1983 farm income with a high degree of accuracy, preliminary indications are that net farm income could drop from last year's $20.4 billion, ranging from $16 to $20 billion after a negative inventory change. Farm production expenses could hold steady or even drop, reflecting very low price inflation and reduced crop production. On the other side of the ledger, higher livestock receipts and government payments may be more than offset by lower crop receipts, reducing gross farm income. Farm income could improve in 1984 as the large crop stocks are reduced through the PIK program and economies strengthen here and abroad.

The Southwest

Bernard L. Weinstein

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Bernard L. Weinstein

Nineteen eighty-two will be remembered as the year the recession finally hit the Southwest. As 1983 began the region's unemployment rate stood at 9.1 percent, up from 7.0 percent at the start of 1982. During 1982, the region's jobless rolls grew from 774 thousand to 1.1 million, and total employment contracted for the first time in memory (see table). Although all of the southwestern states are posting unemployment rates below the national average, the gap has narrowed considerably over the past year. The relative increase in the *number* of unemployed during 1982 was actually higher in Texas and Oklahoma than it was for the nation.

Of course, not all industries and areas have suffered to the same degree. Most of the job losses have occurred in manufacturing, transportation and construction, while employment has increased in retail trade, finance, health services and government. In places like Austin and Abilene, where unemployment is hovering around 4 percent, few signs of recession are visible. By contrast, in Beaumont-Port Arthur-Orange and Lake Charles, with unemployment at 12.4 and 14.2 percent respectively, local economies have been severely disrupted.

The Southwest's economic outlook in large part hinges on the nation's. Fortunately, evidence is mounting that the long-awaited national economic upturn is finally under way. For almost a year the Commerce Department's index of leading economic indicators has been positive. Help-wanted advertising, according to The Conference Board, has been up for some months now after declining for over a year, and initial claims for unemployment insurance have been dropping. Monetary and fiscal policy during 1983 should facilitate economic recovery. Federal Reserve Chairman Volcker has stated his intention to nurture economic growth by keeping interest rates down, and the personal tax cut slated for July will increase disposable income by some $30 to $40 billion. The 98th Congress is likely to be less concerned with budget deficits and more concerned with job-creating measures, such as public works programs. Taking all these factors into account, the consensus of forecasters is that real gross national product should grow about 3.5 percent in 1983, a marked improvement over 1982's shrinkage.

Unemployment Rates in the Southwest

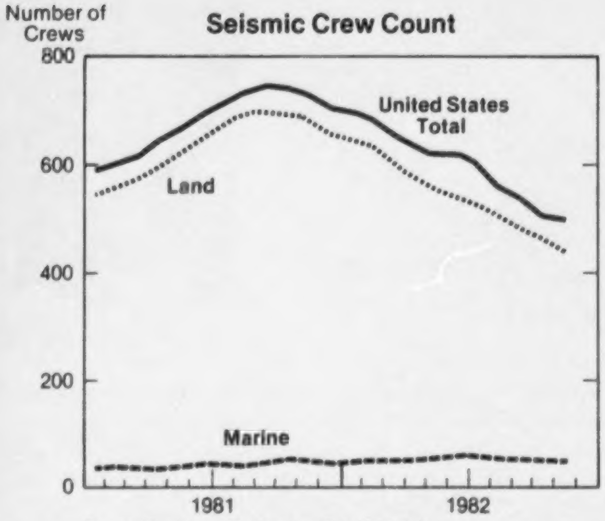
	January, 1982	*January, 1983*	*Percent Change in Number of Unemployed*
U.S.	9.4%	11.4%	22.9%
Southwest	7.0	9.1	38.2
Texas	5.9	8.5	51.5
Oklahoma	4.7	7.7	60.7
Arkansas	11.2	11.1	0.8
Louisiana	9.4	11.3	19.8

Source: Bureau of Labor Statistics.

Against this national scenario, the economic outlook for the Southwest is a mixed bag. The Southwest is not a single entity. Instead, five distinct economic subregions can be identified: the Texas Triangle, the Oil Patch, the Industrial Crescent, the Food and Fiber Belt, and the Border. Some of these regions should do well during the coming year; others not so well.

The Texas Triangle encompasses the area bounded by Dallas-Fort Worth, San Antonio, and the north and west sides of metropolitan Houston. Over 60 percent of the state's population resides within this economic subregion, and the Triangle is home for Texas' major high-technology manufacturers and financial institutions. The Triangle has suffered the least from the lengthy recession and will be the first area in the region to reflect national economic recovery. Electronics, instruments and aerospace have been fast-growing industries for over a decade, and rapid growth should resume as the economy expands. Major defense contractors are also located within the Triangle, and accelerating purchases of military hardware by the U.S. armed forces, as well as by foreign governments, will pump billions of additional dollars into the region over the next several years. Dallas-Fort Worth and Houston are expected to lead the nation in new housing starts during 1983 and 1984.

The Oil Patch consists of the major energy-producing areas in West Texas, Central Oklahoma, and offshore Texas and Louisiana. During the 1970's, these areas experienced an unprecedented boom due primarily to OPEC and the decontrol of oil and gas prices. For the past year, however, the Oil Patch has been severely depressed. The prolonged national recession, coupled with declining world oil prices, pushed the drilling rig count down 50 percent during 1982. Dozens of drillers and oil-field service companies have gone bankrupt, and pipe and equipment manufacturers are overstocked with inventory. Although the active rig count will probably



Seismic Crew Count

Source: Society of Exploration Geophysicists.

increase slightly from its current level, the Oil Patch will remain in recession throughout 1983. As evidence, the seismic crew count, which is considered a leading indicator of drilling activity, has fallen 33 percent since peaking in September, 1981, and continues downward (see chart).

The fortunes of the Gulf Coast Industrial Crescent, stretching from Corpus Christi to New Orleans, are closely linked with those of the Oil Patch. Refining, petrochemicals, steel, shipbuilding and water-borne commerce dominate the Crescent's economy. During 1982, unemployment rates doubled in Beaumont-Port Arthur-Orange, Houston and Galveston-Texas City. Refineries and petrochemical plants are currently operating at less than 70 percent of capacity, major layoffs have occurred at all steel companies, and shipbuilding is at a standstill. Shipping volume is also down substantially in all Gulf ports. The outlook for the Industrial Crescent in 1983 is extremely cloudy. The region's refineries and chemical plants will probably operate below 75 percent of capacity throughout the year, and the steel business will not pick up unless drilling activity improves markedly. A projected continuation of the worldwide recession does not augur well for import-export activity or shipbuilding and repair.

Beginning in the Oklahoma and Texas panhandles and following the Red River and the Louisiana border, the Southwest's Food and Fiber Belt supplies the nation and much of the world with grain, cotton and wood. Depressed prices for food and fiber during 1982 pushed real farm incomes to their lowest levels in ten years. Nineteen eighty-three will not be much better. Much of the region's agricultural output is exported, and a strong dollar coupled with good harvests abroad has dampened prospects for increased foreign sales during the coming year.

Three devaluations of the Mexican peso in 1982 have turned the Southwest Border into a disaster area. Retail sales have declined 50 to 75 percent over the past year, and production in border plants has been severely curtailed. Unemployment rates currently exceed 20 percent in Laredo and McAllen, and Brownsville is close behind. With Mexico technically bankrupt, economic conditions along The Border will probably deteriorate even further during 1983.

Though not as dependent on the energy sector as a decade ago, the southwestern economy still marches in tune with oil and gas prices. The possible demise of OPEC, coupled with congressional reluctance to fully decontrol natural gas prices, could spell long-term trouble for the region.

The Mountains

Lucy Black Creighton
IntraWest Financial Corporation

After staying well below the national average in 1980 and 1981, unemployment rates in the Mountain states moved up by 2 to 5 percentage points between the Fall of 1981 and the Winter of 1982. For example, Arizona's rate rose from 6.5 to 11.1 percent, Colorado went from 5.5 to 9.5 percent, and Wyoming from just over 3 percent to nearly 10 percent. While the slowdown in the Mountain region has been less severe than in many other parts of the United States, and already is showing some signs of turnaround, the recent change of pace from the boom years of the late 1970's, and the energy boom of 1979-1981, is noticeable indeed—and not without pain.

Lucy Black Creighton

While it is easy to say that energy prices were the primary culprit in the "decline of the West," a good case can be made that the change of pace is the consequence of a variety of factors. It is true that the decline in energy prices early in 1982 led directly to a slowdown in oil, gas and synthetic fuels, which are important in the economies of nearly all the Mountain states. But it was the extended national recession that sapped demand for the region's copper, molybdenum, uranium and other nonferrous metals; for lumber; for coal; for electronic and high-technology products; and for tourist-related trade and services. And in a region where agriculture still plays a significant role, depressed crop and livestock prices added to the difficulty. Moreover, rising unemployment, along with uncertainty about the future course of the national economy, dampened local consumer confidence so that 1982 gains in retail sales were generally the lowest since the 1974-1975 recession, and only fractional gains were made in trade and service employment. Total regional employment in 1982 was slightly below its 1981 average, and regional personal income rose only 5.1 percent from third quarter 1981 to third quarter 1982, compared with a 5.6 percent national increase.

In assessing the Mountain states, it is useful to distinguish two sets of states that are affected by different economic factors. Montana, Idaho and Wyoming, each with a total population under one million, fit the image of the west as wide open spaces. Even the largest cities have populations well below 200,000, there is little manufacturing, and close to half of the population is classified as rural. Mining, oil and gas, agriculture, lumbering and tourism are the primary engines of economic growth. It is these industries that have been increasingly under pressure in the past several years, although lumber has recently shown some sign of revival. As a result, personal income in Montana and Idaho grew only 2.7 percent between third quarter 1981 and third quarter 1982, and Wyoming showed only a 3.4 percent gain.

In contrast, the other five states in the region are intensely urban. Colorado, Arizona, Nevada and Utah are well above the national average in percent of urban population, and New Mexico's urban population is at the national average. Indeed, more than one-third of all the people in the Mountain states live in one of four large metropolitan areas: Denver (1.7 million), Phoenix (1.6 million), Tucson (551,000), and Salt Lake City-Ogden (950,000). Nevada, with two-thirds of its employment in trade and services, is perhaps best described as one of a kind. But over the past decade, Colorado, Arizona, Utah and New Mexico have shown rapid urban population growth; substantial and increasing manufacturing employment; and the development of sophisticated trade, services and finance. Electronics components, automated office equipment, and other high-technology manufacturing have been important elements of growth.

Although these urbanized states managed to show continuing growth in 1980 and 1981, it was slower than in 1978 and 1979, as the volume of residential construction was stunted by high financing costs and growth in manufacturing employment steadily weakened. Depressed copper prices led to significant mining employment layoffs in Arizona and Utah; both Utah and Colorado felt the dissipation of the energy boom; and low molydenum prices forced the Amax shutdown of a major portion of its Colorado mining activity. Among these states, only Utah managed any employment growth in 1982, and that was a meager 0.45 percent.

The outlook is mixed. National economic recovery and the lower interest rates that fuel it will have substantial expansionary effect on construction, manufacturing and services employment. Higher consumer spending should boost tourism across the region, with an especially positive effect on Nevada and Arizona. However, mining and agriculture will take longer to recover and the possibility of further declines in oil prices threatens the substantial part of the regional economy geared to oil and gas exploration and development. In the short term, lumber will respond to the pickup in housing; in the longer term, however, the lumber industry, which is important for both Idaho and Montana, will see slow growth as smaller homes and new materials reduce lumber requirements per unit.

Mining is facing not only the slowdown associated with recession, but also longer term changes in demand and supply. Downsizing, recycling and the substitution of new materials for traditional metals are long-term changes that will restrain the growth of demand. And, on the supply side, developing countries with higher quality ore bodies, lower labor and transportation costs, and government subsidies to promote the earning of foreign exchange will increasingly be able to undercut U.S. production. Given the outlook for agriculture, mining and energy, employment growth in 1983 will be less than 2 percent for Montana, Idaho and Wyoming. Continuing national recovery should help raise that to the 2 to 3 percent range in 1984. The urbanized states in 1983 should see employment growth of 2 to 3 percent. As expansion develops, Arizona, Colorado, Nevada, New Mexico, and Utah can anticipate employment growth of 4 to 6 percent in 1984.

Lower interest rates are already producing increased residential construction across the region, with Colorado's housing starts in 1982 up 17 percent over 1981. Nearly all the Mountain states should register a 25 to 35 percent gain in residential construction in 1983, with special force in the rebound of single-family homes. Nonresidential construction is mixed. Denver's three-year, energy-driven office construction boom is coming to a close, with double-digit vacancy rates beginning to appear. Estimates are that it will take from three to five years to absorb the overhang. Denver area industrial and retail construction should respond favorably to economic recovery and increases in consumer spending. After three years of no growth in nonresidential construction, Phoenix is anticipating a nice turnaround with hefty increases in office space as well as in retail and industrial building.

With a national recovery, manufacturing employment, which has been an important growth element for Arizona, Colorado and Utah, should show increases averaging 4 percent in 1983, and 6 to 8 percent in 1984. Depending on the strength of the 1983 recovery, Phoenix—with its ties to the electronics industries of Southern California—could well see a gain in manufacturing jobs of 8 percent or more in 1984. Overall, the urbanized Mountain states should see employment growth of 2 to 3 percent in 1983. As expansion develops, they can anticipate employment growth of 4 to 6 percent in 1984.

Personal income growth for the region probably showed an average 6 percent increase for 1982, but should be 8 percent in 1983, and 9 percent in 1984. Higher inflation than now anticipated would raise those percentages. Although the states with large urban centers are likely to see higher growth rates than their less urban counterparts, indications are that the Mountain states as a whole should match or exceed the nation's average rate of economic growth over the next several years.

The Pacific

Larry J. Kimbell
UCLA

Larry J. Kimbell

Personal income growth from the third quarter of 1981 to the same quarter of 1982 was close to the national gain in California, Hawaii and Washington, far ahead in Alaska, and well behind in Oregon (see table).

Alaska is a world apart from the rest of the states, both geographically and in terms of its economic activities. As shown in the table, Alaska's nonagricultural employment grew 6.2 percent in 1982—during the worst and longest recession in post-World War II history. Personal income rose 21.2 percent in Alaska from the third quarter of 1981 to the same quarter of 1982. Last year, oil riches enabled Alaska to provide an oil rebate and support construction with state-subsidized mortgages. The OPEC price drop will slow activity in Alaska this year and next. A severe price break, say to $20 per barrel, could shut down North Slope production and bring the oil boom to a sudden halt. It is very unlikely, therefore, that Alaska will outrun the U.S. economy in 1983 as much as it did in 1982.

Recent Evidence on the Pacific Region

	US	AK	CA	HI	OR	WA
Personal income— % change						
Q3 '81 to Q3 '82	5.5	21.2	6.7	6.3	3.5	5.7
Unemployment rate(%), January 1983	11.4	12.3	11.7	5.6	13.6	13.3
Employment change (%), 1981 to 1982						
Total nonfarm	-1.6	6.2	- 0.6	-0.9	- 5.7	- 2.6
Durables manuf'g	-8.3	n.a.	- 4.5	-4.7	-10.6	- 5.6
Lumber & wood	-8.2	n.a.	-19.2	n.a.	-12.8	-11.4

Hawaii's recent economic performance was slightly better than the national average in terms of personal income growth and job losses. Its unemployment rate was far below the national averge in January, 1983. Tourist traffic has benefited from airline fare wars on the very competitive Pacific routes, but these special rates could disappear any day. Also, hurricane damage will take months to repair, possibly slowing the tourist traffic. Agriculture in Hawaii suffers from foreign competition for its pineapples and other fruits, as well as low sugar prices. Some plantations destroyed by the hurricane do not plan to reopen. Nevertheless, tourism is highly income elastic, so with U.S. real disposable income expected to increase 4.3 percent from the fourth quarter of 1982 to the same quarter of 1983, Hawaii should recover reasonably well.

California, Oregon and Washington shared a common fate during the long housing depression from 1979 to 1982, namely, each lost significant employment in the lumber and wood-products industry. In 1979, Oregon had 81,000 people in this industry, 10.6 percent of U.S.

lumbering employment and 47 percent of all durable goods manufacturing employment in Oregon. California had the second highest lumber employment among these three states, with 69,000 jobs in 1979, 9 percent of U.S. lumbering jobs but only 5 percent of the employment in durable goods manufacturing in California. Washington employed 54,000—7 percent of the nation's lumbering jobs and 24 percent of Washington's durable goods manufacturing jobs. From 1979 to 1982, lumbering employment dropped 30 to 35 percent in the three states, compared with 20 percent nationally.

The outlook for lumber and wood products has brightened very quickly with the spectacular housing recovery in early 1983. Housing starts exceeded an annual rate of 1.7 million units in both January and February, back to the 1979 level. Mortgage rates have dropped from the punishing level of 15.4 percent in 1982 to under 13 percent. Savings and loan associations are attracting large deposit flows to the new competitive accounts, and spreads between new mortgage rates and the cost of funds are attractive. Lumbering will not recover as quickly as housing starts, but a strong recovery is nevertheless very likely. Oregon, with the greatest dependence on this industry, will benefit the most.

Employment in the aircraft and parts industry fell more than 5 percent in both California and Washington in 1982. Ordinarily, a severe recession might make this expected. What is unusual this time is that the drop coincided with a major buildup in defense spending, including a restarted B-1 program, on-going F-18 development, initial research and development on a new "stealth" technology, and other military aircraft parts production. However, the commercial business at Boeing, McDonnell-Douglas, and Lockheed has been devastated. Lockheed is phasing out production of its lone commercial venture, the L1011; McDonnell-Douglas received only one order for the DC-10 in the last 13 months; and Boeing has slowed production lines on its jumbo jetliners.

The Pacific outlook is cautiously optimistic. The growth of real defense spending will probably slow down but continue to outpace real GNP growth for years to come. Airlines, if they finally stabilize fares, either through new regulation or through bankruptcies, will see a reasonably strong pickup in revenue passenger miles; also, fuel costs are lower than in 1981, as are interest costs. Massive losses for major trunk lines are likely to stop soon. Boeing is launching two new commercial jets, the 757 and 767, with a considerable amount of subcontracting in Southern Canifornia. McDonnell-Douglas is betting on a mid-size plane with better fuel efficiency. Continuing defense orders and reviving commercial activity should gradually restore jobs in these important industries in California and Washington, with growth starting in 1983 and accelerating in 1984.

California, Oregon and Washington will be helped by the housing-led recovery now under way in the U.S. economy, not only in terms of lumber production but also because of added residential construction activity. Aerospace production will revive in 1983 and 1984. These states, which now have relatively high unemployment, will match or exceed job growth in the United States generally. Unemployment will drop but remain above the national rate because of migration.

In summary: A strong recovery has begun in the U.S. economy with housing leading the way, due to sharply lower interest rates. Consumer spending has been cautious, but strong growth in real disposable income augurs well for consumer spending in 1983. Real defense spending will continue rising rapidly, even if the President's requests are cut back by Congress. The Pacific region will respond well in this environment with gains in personal income and jobs slightly faster than in the United States.

Alaska's key risk lies in a break in oil prices to below $25 per barrel—not predicted but not improbable.

California is battling the "raiders" of its high-tech job base. High home prices are a major deterrent to expansion in urban coastal California, so as growth resumes in electronics and computers, expansion could easily go elsewhere.

Hawaii's worry is that airline fare wars will end and boost prices sharply.

Oregon must be concerned about large federal deficits possibly colliding with restrictive monetary policy, aborting the housing recovery as it did in 1981.

Washington faces the risk of losing its low cost electricity position, based on hydroelectricity, and becoming a much higher cost state. The state is awaiting the outcome of litigation concerning its public nuclear power system, potentially the largest municipal bankruptcy in the history of the U.S.

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Research Bulletin

number 141

Summer Youth Employment:

The Corporate Experience

by Leonard Lund
and
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The Conference Board

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Introduction

The proverbial summer job, once the casual concern of students and local employers, has become a matter of public policy during the past few years. Formerly, a summer job was a means to extra spending money, or a way to meet the upcoming year's college expenses. It was also an inexpensive way for employers to bridge vacation absences. Now, a summer job also can mean a socially responsible act for an employer, an opportunity for a meaningful employment experience for a young person—student or nonstudent—and a way to keep a community "cool" during the summer.

Summer-job programs today are organized community efforts, developed and marketed with some of the same techniques used for products or candidates. These "campaigns" to provide jobs for disadvantaged youth involve scores of volunteer corporate executives, numbers of community and governmental agencies, business and political leaders, and an extensive and sophisticated use of advertising media.[1] (Note the details of the "Summer Jobs for Youth/82" campaign in New York City, pages 12-13.)

Other job programs may also include the participation of the National Alliance of Business, which has published a handbook on how to organize and conduct such programs, and local Private Industry Councils.[2]

The Background

Throughout the early 1970's, the role of the private sector in summer-job programs had been limited primarily to providing some of the jobs, or making cash and in-kind contributions, often at the request of a local government or community agency. But by the end of the decade, corporate leaders in many industrial cities were undertaking more active efforts to coordinate the private sector's involvement.[3]

During the Summer of 1982, programs organized and operated by the private sector were under way in numerous cities, often in addition to—or in cooperation with—the government-funded CETA projects.[4] This move from a largely passive to an active role coincides with the Reagan Administration's emphasis on voluntarism and private-sector initiatives as an alternative to government programs in the resolution of pressing social and economic problems. It may also reflect a growing awareness on the part of corporate management that summer youth unemployment remains an issue serious enough to warrant concerted or organized approaches. While many firms continue to administer their own summer-employment policies, apart from any coordinated undertaking, there is a discernible move within the private sector away from individual, and toward cooperative solutions.

About This Research

A major policy initiative of the present Administration is reliance on the private sector as an alternative to government in the resolution of social and economic problems. To explore the effects of this policy as it applies to summer youth employment, The Conference Board undertook a review of corporate experiences during the Summer of 1982.

A questionnaire on individual and community youth employment practices was sent to the largest corporations in cities of over 250,000 people. Of this sample of 480 companies, responses by 176 firms, or just over one-third of the population, provide the data for part of this report. In addition, interviews were conducted with private-sector program coordinators in fourteen cities, selected on the basis of size and location.

This development has affected government and social organizations as well as other corporations. In some cities, in fact, private firms have taken the initiative to request cooperation by local government agencies—generally a reverse of the historic situation in which some local or federal authority would make an appeal to private companies to "give a damn," as a popular promotional campaign once put it. In Atlanta, Georgia, for example, the Housing Authority was contacted by two major corporations to provide youths for the companies' individual summer openings. Following these requests, the Authority attempted to interest other firms in the city, and will continue that effort for the Summer of 1983. In turn, the Authority is working with its tenant associations on an information and publicity campaign, thereby extending the participation to additional sectors.

Summer Jobs as a Public Policy Issue

The availability and distribution of summer jobs became public policy issues following the summer riots of 1964, when federal manpower and training legislation added summer programs as an antidote to that season's idleness and as a way to pump funds into the hands of disadvantaged young people in many urban centers. Expanded recreation programs, as sponsored by private and public agencies, had not proved to be adequate deterrents to youth unrest.

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[1] The term "disadvantaged youth" includes young people (16 to 21) who qualify under the Comprehensive Employment and Training Act (CETA) definition of being economically disadvantaged, that is, a member of a family receiving public assistance, or part of a family whose income in the previous six months does not exceed the poverty level or does not exceed 70 percent of the lower living standard income level.

[2] National Alliance of Business, *Summer Youth Employment, A Technical Assistance Guide.* Washington, D.C., January, 1982.

[3] Henrietta Schilit and Richard Lacey, *The Private Sector Youth Connection, Volume I: School to Work.* New York: Vocational Foundation, Inc., 1982, esp. Chapter 8: "Summer Youth Employment."

[4] CETA is being phased out, and will be replaced by The Job Training Partnership Act.

By 1980, the CETA summer-job program was providing public-sector placements for more than 700,000 young people. This was in addition to job programs provided by individual companies and those public-service jobs financed by charitable organizations and local governments.

Many of these locally funded programs were traditional seasonal jobs in parks and playgrounds. Youths were employed as recreation workers, lifeguards or maintenance people, and performed simple clerical functions. The federally funded CETA summer jobs were essentially similar in nature, and in some instances merely replaced existing positions with CETA-eligible candidates, rather than increasing the number of jobs available.

The CETA summer-job program stirred controversy in much the same fashion as the other countercyclical public-sector employment programs created by the Act. Some critics of CETA charged that the summer employment programs were merely "leaf-raking" jobs, providing scant usefulness as a work experience that could be translated into permanent employment—one of the stated objectives of the program. A more devastating critique of the program was made by former Senator Lawton Chiles of Florida, who "has charged the summer program with having a plainly adverse effect on youths whom it is supposed to prepare for the job market. The senator says that, from watching their indolent and indifferent supervisors, the young trainees 'get such a strong message of cynicism and corruption that it cannot fail to carry over into their attitudes about work, crime, and society.' "[5] At the same time alleged "horror stories" circulated about physical intimidation of municipal supervisors by crews of CETA summer workers so that they would be required to do little or no work.

On the other hand, there are examples of job programs that are providing young people with some valid job experience while benefiting the community. A study of the CETA program, conducted by the National Council on Employment Policy in 1981, found that these jobs for in-school youths benefited participants by providing income and involvement in rudimentary work activities. However, they offered no training. Nevertheless, the Summer Youth Employment Program did help reduce unrest, lower youth arrest rates from 3.2 percent to 1.5 percent, and lessen failure to return to school from 9.4 percent to 6.1 percent.[6] Despite whatever weaknesses may have been identified, the value of continuing the summer-job programs has been confirmed and publicly underwritten. The Job Training Partnership Act, a replacement for CETA, calls for grant allocations of $725 million to support 718,000 summer public-sector jobs in fiscal year 1983 and the same number in FY 1984.[7] Moreover, the President has placed a high priority on urging business people to hire young people for summer jobs. The Administration has, in addition, proposed legislation allowing for a "subminimum wage" for summer youth jobs; the proposal assumes that a lower wage will encourage more such hirings.[8]

Experience From the Summer of 1982

The overall environment for summer jobs in 1982 was one of fewer job opportunities in the face of a higher general level of unemployment. Confirming this, nine out of ten companies responding to The Conference Board's survey reported that the youth unemployment problem in their headquarters' community had "become more severe"—due mainly to the deteriorating condition of both the national and local economies.

The self-evident greater need for employment opportunities for youth, and the concerted efforts in larger cities to generate jobs in the private sector resulted in the involvement of a larger number of businesses in 1982's summer-jobs programs. But there were fewer jobs available for young people overall.

Of the 176 companies responding to The Conference Board's survey, 70 percent indicated that they did take part in summer-job programs in 1982. This means also that one out of four companies in the selected sample of 480 firms, the major employers in cities with a population of over 250,000, provided some jobs for young people. It should be noted that some of this involvement, particularly in the companies that operate their own programs, has been part of the firms' urban programming for many years, paralleling the public summer-job programs developed in response to the riots of 1964. A majority of the involvement, however, is of recent origin and can be seen as part of the private sector's voluntary assumption of programs that had heretofore been financed almost wholly by the Federal Government.

Of the 124 companies involved in summer-job programs, 89 firms (or 72 percent) took part in programs for disadvantaged youth, and almost eight out of ten of these jobs were part of communitywide summer-job programs, where the major portion of growth in business involvement has come. Only 19 of the responding companies are now involved in single-company programs. And several of these firms participate in both community and single-firm programs.

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[5] Juan Cameron, "How CETA Came To Be A Four-Letter Word," *Fortune*, April 9, 1979.

[6] National Council on Employment Policy, *CETA's Results and Their Implications*. Washington, D.C., September, 1981, p. 4.

[7] National Council for Urban Economic Development, *Legislative Report*. Washington, D.C., February 15, 1983.

[8] *National Journal*, March 5, 1983, p. 487.

Table 1: Summary of Survey on Summer-Job Programs

Kind of Program	Number of Companies	Percent of Response	Percent of Job Programs
No Summer Jobs	52	30%	—
All Summer Job Programs	124	71[a]	100%
Jobs for Disadvantaged	89	51	7
Run by company	19	11	15
Run by community or business organization	70	40	56
Other Jobs Program[1]	35	20	28
Seasonal hirings	22	13	18
For college students	13	7%	11%

[1] While this category places no emphasis upon the hiring of minority and disadvantaged youth, neither does it exclude them. Some of the college internships are reserved for disadvantaged youth. In these programs, ability is the prime requirement since these jobs usually lead to regular employment.

[a] Details do not add to 100 because of rounding.

Not all of the involvement is in programs targeted for disadvantaged youth. About 50 of the firms continue to conduct summer-job operations as a means to meet seasonal staffing needs. Many of these companies often give preference to the children of regular employees.

A considerable number of companies explained that they were providing fewer jobs in 1982 than in the previous year. Only six respondents stated that they had no summer positions at all in 1982.

A little more than a quarter of the responding companies report that they have some involvement with training and hiring programs on a year-round basis, usually with the local Private Industry Council. While some of these companies do not do any specialized summer hiring, others are active in both types of activities.

What Kinds of Jobs?

As noted earlier, most of the summer jobs, as provided under public-sector programs, were routine, low-skill clerical or maintenance positions, despite the hope of the administrators of the federal programs that summer work should offer "expanded career awareness that would develop job readiness skills."[9] The majority of the jobs provided in the private-sector programs were of the same quality. Most were clerical and service (mailroom, messenger, maintenance, and the like). These jobs, like the public-sector jobs provided little, if any, training. Less than 10 percent of the companies involved in summer efforts report that they did any training. Among those that did, some provided career counseling and job-seeking information, and several others said that they gave training in communication skills. Among the nineteen companies that operated their own programs, only two provided any kind of specific skills training.

In some of the community or business organization programs, such as the New York Partnership's Summer Jobs for Youth/82 program, a serious effort was made to match openings with applicants and the program supervisors were pleased that they had substantial improvements over the past year's experiences.

A major selling point of the community-based efforts, such as the Partnership's program, is the opportunity for businesspeople to hire needy teenagers as extra help at a reasonable price. Most of the jobs are for an eight-week period, and some are less than a full forty-hour week. Thus, at a minimum wage of $3.35 per hour, costs to the employer are a little more than a total of a thousand dollars per job. This amount could be reduced a bit by the company claiming a tax credit under the federal Targeted Jobs Tax Credit program. However, fewer than 10 percent of the employers surveyed made such claims.

Motivations

The motives and incentives that are cited by the survey respondents as most important lean heavily toward social obligation. Of the fourteen reasons suggested on a checklist for participation in summer-job programs, the following three were most often cited:

- an interest in advancing opportunities for youth;
- an act of social responsibility;
- a means of practicing community involvement.

Three out of five of the next most popular motivations were directed to the firms' own needs. They included:

- good public relations for the company;
- the operational need for additional employees in the Summer;
- willingness to cooperate with local government or public institutions;
- means to help stabilize the community;
- chance to screen potential new employees.

It is interesting to note that one of the least persuasive motivations was "peer pressure from other business leaders." Yet this seems to be one of the key elements in putting together a successful community-based summer-job program.

Given all of these motivations, the summer-job experience, despite lowered goals in most communities, can be adjudged to have been relatively successful on several counts. More than 70 percent of the responding companies reported that the programs in which they participated were well run, and 66 percent say that they will participate again. Only 3 percent noted that they may wish to reconsider their participation.

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[9] Thomas A. Johnson, "Summer Jobs for Youths Gaining Full-Time Status," *The New York Times*, September 22, 1980.

Expectations

With a continuing concern about the high level of youth unemployment, in particular for minority and disadvantaged youths, a number of communities are considering the feasibility of building upon the success of summer-job programs to create year-round operations. This has been a long-range goal of the New York Partnership's Summer Jobs for Youth/82, as well as of similar programs in other cities.

Those who are assigned responsibility for structuring a year-round program are familiar with the very real differences between these two kinds of efforts. While the summer-job program is a relatively limited, inexpensive program—staffed largely by volunteers and providing marginal jobs with little or no training content—the full-year program would require a permanent cadre of trained specialists to find meaningful positions. The jobs should have career potential, and such training as may be necessary to prepare an unskilled young person for regular employment. Certain aspects of the summer programs, particularly the voluntary organization structure, the cooperation with public-sector agencies and community organizations, and the marketing and media activities, are components transferable to a year-round operation. However, an altogether different set of aims would have to be applied—emphasizing fewer but better-quality placements.

Another major consideration is the dichotomy between the accepted view that businesses are cost conscious and rationally aim for maximum productivity, and the goal of a year-round job program that asks businesses to hire youth because they need the jobs. While a summer-job program can bridge this philosophical gulf because it is short-term and inexpensive, a similar approach, as a standard for a yearly business operation, would not be acceptable for many companies.

The survey indicated that the leading motives for hiring summer workers were an interest in advancing opportunities for youth and an act of social responsibility. In the long run, for a full-time program, the choice may be between the real needs of businesses and the things they can afford to do for needy youth.

Experiences of Selected Cities

This section presents an overview of Summer, 1982, programs coordinated by the private sector in 14 cities. Highlighted are each city's goals, experiences and effectiveness in coping with the overall problem.

Except where otherwise noted, the unemployment data were provided by the U.S. Bureau of Labor Statistics (BLS). In general, the jobless figures should be seen as *understatements* of the problem within each city. First of all, the data are for August, 1981, the latest summer month for which such figures were available on a city-by-city basis. It can be safely assumed that in most, if not all, of these cities, the rate was actually higher, in accordance with the nationally reported seasonally adjusted increase. In August, 1982, the national youth unemployment rate for both sexes and all races was 24 percent, up four points over the previous year. (Minority youth unemployment, as usual, was considerably higher.) In absolute numbers, that meant an additional 291,000 young people idled, for a total of over two million unemployed youths. Furthermore, the BLS counts as youths only those between the ages of 16 and 19, whereas most corporate youth programs include people up to 21. Finally, the BLS specifically excludes youths classified as "discouraged"—those who have given up looking for work after an extended period of fruitless job searches.

Small Inroads

Perhaps the outstanding finding in the present survey is that the dent in youth joblessness made by private-sector efforts was, in most cases, miniscule. Chicago, for example, placed only 730 youths out of at least 37,000 out of work—under 2 percent. And that percentage, again, is an overestimate in light of the factors cited above.

The situation was much the same for the other cities, with the exception of New York and Houston. The New York City effort was by far the most extensive of the private-sector undertakings—fully computerized, staffed by over 200 volunteers, employing a massive publicity campaign, and planned for a full year. Sponsored by the New York City Partnership, the project obtained over 15,700 jobs. But the official youth unemployment figure, underestimated, was 55,000. This means that the New York effort would have had to come close to tripling its effectiveness rate to have a substantial impact on the problem.

Asked why he thought more headway had not been made, a representative of the Partnership, Walter Heithaus, likened the problem of summer youth unemployment to "pushing a manhole cover across 42nd Street with your nose."

"Why didn't we get 100,000 jobs? Because we were not organized to get them. What we did was a start, and we are still in the process of improving the system of matching the jobs with the jobless. We have not stopped doing that." While commenting on the cooperative nature of the project—government, labor and community groups were participants—Heithaus emphasized that: "The solution lies partly in the private sector. The effort simply has to be bigger." It is likely that the New York City program will serve as a model for undertakings in other areas. Project coordinators from several cities mentioned that they had visited the Partnership headquarters during the Summer to review operations.

No matter how large or well-coordinated the effort, however, no significant improvements can be expected in cities where there are virtually no private jobs to be had. For three of the cities in this report, in fact, no private-sector positions were secured at all. Instead, project coordinators were able at best to receive cash contributions from the firms to place youths on community projects or in government agencies. In general, youths so employed were involved in neighborhood-improvement projects, in social-service delivery, or in entry-level clerical positions.

Trends

Interviews with program administrators revealed a number of emerging trends in summer employment projects. Establishment of numerical goals, in terms of youths to be employed, is no longer as popular as it had been in the past. Even in cities where the economic base is not deeply depressed, goal setting is often considered as much a drawback as a help. "It becomes a numbers game," one administrator noted, adding that the time and energy placed in developing figures for final reports would be more productively spent in securing work sites or cash donations.

In cities so severely hit by the recession that private-sector jobs could not be obtained, efforts were made to place youths on community projects that had some significance beyond merely serving as a workplace. "After the Summer we talked to the kids involved, and they really felt a sense of accomplishment in bringing back to life a park that had been neglected for about 20 years," explained a representative of the Cleveland project. "Now that park will be used for community activities." Related to the feeling of accomplishment among the youths was their reported satisfaction in being identified with specific corporate sponsors.

Satisfaction was not restricted to the employees. Numerous program administrators emphasized that employers themselves "had their own stereotypes demolished," as one coordinator said. Company managers were consistently reported to be pleasantly surprised at the quality of the young workers, in terms of high productivity and willingness to work. This is borne out by the survey finding that 70 percent of the firms indicated it was possible to carry over some summer employees to year-round jobs.

Relating jobs directly to education is a concept growing in popularity. Coordinators for projects in several cities offered their local school system a strong incentive: that students whose math and reading skills, attendance and other standards showed marked improvement would be first in line for the jobs. Boston has formalized this concept into The Boston Compact, under which cooperating businesses offer a specific number of jobs to graduates if the schools meet a set of clearly defined educational improvement goals.

Because such arrangements tend to provide for a more direct corporate involvement in the school system in terms of planning and personnel, they have been greeted with both praise and skepticism. While applauding the additional resources for the schools, some critics have raised questions concerning possible long-range effects. As one education observer noted in *The Christian Science Monitor:* "A century ago schools were built to look like factories—ensuring a tractable work force whose aspirations went no further than the local mill. Is this a return to a view that educational policy is to be guided not by the long-range needs of the students but by the immediate wishes of employers?"[10] The same reporter answered in the negative, based on a reading of the actual plan, and went on to urge the corporate sector to support the Compact.

Perhaps the most encouraging trend is that most, if not all, of the coordinated summer projects will be undertaken again in the Summer of 1983. In fact, in many cases preparations began as early as September 1982, as administrators stressed the importance of early planning and the need to secure broadly based participation. The more complete the involvement by the private, public and community sectors, the more likely the success of the endeavor, according to the coordinators.

But success is a relative term. If it means making a start, or catalyzing and coordinating the activities of a variety of companies and other organizations, all the projects described in this report were successful—at least according to the coordinators. If, however, success is measured in terms of reducing the overall youth-unemployment problem, then the private-sector operations have not been shown to be superior to the governmental programs.

Nor is it likely that the Federal Government will increase much of its own support in this area. As of this writing, the House and Senate had reached agreement on a $4.6 billion emergency jobs bill, $100 million of which would go for additional summer jobs for youth. However, the impact on summer youth unemployment, as well as on unemployment in general, was not expected to be significant. As House Minority Leader Robert H. Michel (R-Ill.) noted during the congressional deliberations: "As a matter of fact, that blip of four-tenths of one percent in the unemployment rate (from 10.8 to 10.4 percent in January 1983) created far more jobs than we're going to be able to create in this package we're talking about."[11]

Following are the highlights of corporate-administered programs for each of the 14 cities studied.

[10] Rushworth M. Kidder, "The Boston Compact: Breaking the Stalemate in the Public Schools," *The Christian Science Monitor,* September 30, 1982.

[11] Helen Dewar and Juan Williams, "Don't Alter Jobs Offer, GOP Says," *Washington Post,* February 16, 1983.

BALTIMORE

Youth Unemployment	21,000 (21.6 percent)
Numerical Goals	1,000 jobs
Youths Employed	1,740
Private Sector Jobs	800
Community or Agency Jobs made possible through cash contributions	940
Corporate Participants	350

Government Participants

Public school system, Mayor's office.

Other Participants

City employees donated or raised $60,000. Community groups provided openings and volunteers.

Employer Recruitment

Job-solicitation efforts were coordinated by the Private Sector Steering Committee, comprising representatives from the Private Industry Council, the Voluntary Council, the Greater Baltimore Committee, and Help Unite Baltimore (a black business leaders' organization). The PSSC secured volunteers from member companies to solicit job offers by phone.

Youth Recruitment

For private-sector jobs, youths were recruited through the public school system. Economic need and school performance were the selection criteria. For non-private-sector jobs, the regular Summer Youth Employment Program, funded by the U.S. Department of Labor, was used.

Publicity

Numerous press conferences were held, one for each new phase of the project or each new major participant. One hundred thousand brochures were mailed to corporations.

Miscellaneous

Cooperation by many sectors was recognized as key to the project's success. According to a survey by the coordinator, 96 percent of the employers agreed to cooperate in the Summer of 1983.

Project Coordinator

Mayor's Office of Manpower Resources, 701 St. Paul Street, Baltimore, Maryland 21202.

* * * *

BOSTON

Youth Unemployment	17,000 (14.2 percent)
Numerical Goals	750 jobs
Youths Employed	852
Private Sector Jobs	852
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	152

Government Participants

Prime CETA sponsor; school system.

Other Participants

54 community organizations.

Employer Recruitment

Personal and written requests to CEO's on Private Industry Council's board of directors and in Chamber of Commerce. Each PIC board member also made personal calls to targeted CEO's. Project staff solicited jobs through phone calls.

Youth Recruitment

School system; panels of teachers and company representatives matched students to jobs and arranged for interviews.

Publicity

Start-up press conference in March resulted in articles in the daily and weekly press and a television talk show. According to the project coordinator, the media viewed the Boston summer youth project as a "soup to nuts" program that went beyond hiring, to counseling and follow-up.

Miscellaneous

Following Boston's first summer employment program in 1981, the Private Industry Council perceived a need to sustain a year-round effort in conjunction with the public schools. Industry and education leaders developed the Job Collaborative, under which interdisciplinary teams in selected high schools provide special services for youths in career education, remedial reading and math, placement in unsubsidized jobs, and monitoring employment and education after graduation. Participating youths are those who have experienced trouble in school or in finding jobs, but they must adhere to "strict performance standards." Private employers are involved in "all aspects of the program, from guidance and instruction to job placement and financial support," according to a program description.

A second program, called The Boston Compact, is a strategy by business to use jobs as a "powerful motivator" for students, teachers and school administrators. Under the Compact, schools commit themselves to measurable goals in terms of reading ability, dropout declines, and so forth. Likewise, cooperating businesses commit themselves to the goal of "a 5 percent increase per year in the number of graduates who are placed in jobs or in further education."

Project Coordinator

Boston Private Industry Council, 110 Tremont Street,
Boston, Massachusetts 02108.

* * * *

CHICAGO

Youth Unemployment	37,000 (16.5 percent)
Numerical Goals	None
Youths Employed	730
Private Sector Jobs	700
Community or Agency Jobs made possible through cash contributions	30
Corporate Participants	45

Government Participants

Board of Education, Mayor's Office of Employment and Training.

Other Participants

Chicago Urban League, plus 25 community groups.

Employer Recruitment

Mail campaign, word of mouth.

Youth Recruitment

School system and Chicago Urban League.

Miscellaneous

Central concept was to use jobs program as an educational stimulus. Schools were informed that students with higher grades and better attendance would be first in line for summer jobs. Career counseling and course assessment were built into project. At end of project, youths addressed a number of the CEO's on their work experiences.

Plans for 1983 are considerably more ambitious, with an unofficial goal of 14,000 placements.

Project Coordinator

Chicago United, 6 North Michigan Avenue, Chicago,
Illinois 60602.

* * * *

CLEVELAND

Youth Unemployment	12,000 (18.8 percent)
Numerical Goals	None
Youths Employed	125
Private Sector Jobs	—
Community or Agency Jobs made possible through cash contributions	125
Corporate Participants	24

Government Participants

School system, Mayor's office.

Other Participants

Cleveland Foundation, YMCA, church groups, community organizations.

Employer Recruitment

Massive mailing requested direct hires. According to the project coordinator, this effort was not successful, given a late start and Cleveland's severely troubled economy. Additional efforts included a mailing to 100 targeted major companies, plus follow-up phone calls to CEO's. Coordinator's chairman held a meeting for 20 select corporations requesting their backing.

Youth Recruitment

Youth Service Coordinating Council representing local Y's, public school system, and other groups referred youths to project coordinator.

Publicity

Public service television announcements by Mayor and other participants. Articles in business and labor publications and general media. Brochure distribution.

Miscellaneous

Aim was to stimulate as much activity within the private sector as possible—if not in jobs then in cash contributions. Youths placed on community- or city-work projects were thus sponsored by particular corporations. Each company sponsored either a complete work team consisting of four youths plus a supervisor, or a single team member.

According to project coordinator, many youths expressed satisfaction at two aspects of the project: being identified with a major corporation, and working on worthwhile tasks such as restoration of neglected city parks.

Project Coordinator

Manpower and Education Resources Center (Metropolitan Cleveland Jobs Council), 690 Union Commerce Building, Cleveland, Ohio 44115.

* * * *

DETROIT

Youth Unemployment	35,000 (21.0 percent)
Numerical Goals	None
Youths Employed	400
Private Sector Jobs	—
Community or Agency Jobs made possible through cash contributions	400
Corporate Participants	16

Government Participants

Parks and Recreation Department, school system, Department of Manpower.

Other Participants

United Auto Workers, Police Athletic League, Hudson-Weber Foundation, plus about 20 community organizations and churches. Sponsors included National Alliance of Business and Private Industry Council.

Employer Recruitment

Personal meetings with community affairs and public affairs officials of major corporations, plus follow-up mail and phone campaign.

Youth Recruitment

Referrals from community groups and churches.

Publicity

Letters sent to media resulted in radio and television spot announcements and appearances on television talk shows. Project coordinator has well-established public relations operation with ongoing cooperation from local media.

Miscellaneous

Beneficiaries of the Detroit program were senior citizens, who received free home repairs; young students, who received free tutoring service; and the general public through repairs to parks and swimming pools. According to project coordinator, efforts were made to place youths in jobs that were "meaningful, not make-work."

Funds from the Hudson-Weber Foundation allowed for additional employment of supervisors. United Auto Workers provided training staff and facilities, and corporations provided volunteer administrative staff and equipment.

Project Coordinator

New Detroit Inc., Commonwealth Building, Detroit, Michigan 48226.

* * * *

HOUSTON

Youth Unemployment	7,000 (8.0 percent)
Numerical Goals	5,100 plus
Youths Employed	3,000
Private Sector Jobs	3,000
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	no information available.

Government Participants

Texas Employment Commission, school system.

Other Participants

National Day Care Centers of America, Volunteer Action Centers of Harris County, several church groups.

Employer Recruitment

Houston Chamber of Commerce mailed requests in April to 8,700 corporations, signed by Mayor, Chamber of Commerce chairman and local representative of President's Task Force on Private Sector Initiatives. A follow-up phone-a-thon was staffed by corporate and civic volunteers.

Youth Recruitment

School system established five centers throughout the city where job-search training seminars were conducted. Job applications were distributed to all school counselors.

Publicity

Television spot announcements, features and public-affairs programs, plus local newspaper coverage.

Project Coordinator

Greater Houston Alliance of Business, 3637 West Alabama, Suite 340, Houston, Texas 77027.

* * * *

LOS ANGELES

Youth Unemployment	56,000 (22.0 percent)
Numerical Goals	8,500
Youths Employed	6,900
Private Sector Jobs	6,900
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	2,000

Government Participants

School system.

Employer Recruitment

Arranged by major bank in Los Angeles that served as project sponsor.

Youth Recruitment

School system; project coordinator distributed brochures on job-seeking tips.

Publicity

Radio interviews with sponsor, local newspaper coverage.

Miscellaneous

Summer employment program has been in operation since 1975, and will continue into indefinite future.

Project Coordinator

Youth Opportunities Unlimited, P.O. Box 3307, Los Angeles, California 90051.

* * * *

MIAMI

Youth Unemployment	9,000 (7.8 percent)
Numerical Goals	None
Youths Employed	940
Private Sector Jobs	940
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	60

Government Participants

State Employment Service, Partners for Youth (Dade County Government), Dade Community Revitalization Board, school system.

Other Participants

Troubled Children Foundation, numerous community groups.

Employer Recruitment

Mail campaign. All jobs were listed with the State Employment Service.

Youth Recruitment

Florida State Employment Service, community organizations.

Publicity

Start-up press conference was held in April. All local television stations were contacted, and agreed to produce public-service spot announcements throughout the Summer. Radio spots were also secured. Articles appeared in daily and community newspapers. Radio and television talk shows featured staff of the Private Industry Council and other participating organizations. Additional publicity consisted of bumper stickers, aerial advertisements, and posters on bus benches and billboards. Airport computer sign flashed a "hire youths" message for 15 minutes every hour.

Miscellaneous

Major aim of project was to target all companies employing five or more people. Another aim was to locate as many jobs as possible in areas near to youths' own residences to minimize transportation expense. Both aims were accomplished—at least in part. Project coordinator attributed success of project to "comprehensiveness of the effort and the shared responsibilities and resources of separate agencies working to overcome bad times." For 1983, operations began earlier in the year, with added emphasis on active business participation. "Business appealing to business has proved to be more successful than traditional public-sector appeal to business."

Project Coordinator

Private Industry Council of Dade County, Inc., 6555 N.W. 36th Street, Miami, Florida 33166.

* * * *

NEW YORK CITY

Youth Unemployment	55,000 (28.5 percent)
Numerical Goals	15,000 jobs
Youths Employed	15,789
Private Sector Jobs	15,789
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	1,500

Government Participants

Board of Education, City Department of Employment, State Employment Service.

Other Participants

Career Opportunities for Brooklyn Youth (a multibusiness, labor and community partnership), Private Industry Council, New York Chamber of Commerce and Industry, several private foundations, numerous community and civic organizations.

Youth Recruitment

City Department of Employment referred youths who could not be accommodated by the regular Summer Youth Employment Program. CETA funds, however, provided public-sector jobs for about half the applicants. All youths were from families with incomes below the lowest income level of a hypothetical "self-sufficient urban family of four," as established by the U.S. Bureau of Labor Statistics. In New York City, that level was $15,704 in Fall, 1981.

Employer Recruitment

Massive outreach consisted of several million flyers accompanying utility and other bills; 55,000 letters sent to private firms; 20,000 phone calls made by 200 volunteers. Special efforts included 125 students from the City University of New York making bus trips through each of the five boroughs canvasing for jobs. (They raised 300 offers.).

Publicity

Publicity was conducted by a private advertising firm on a pro bono basis. Its aim was to make "Summer Jobs for Youth" a household phrase. Project coordinator urged business firms to devote part of their advertising budgets to run Summer Jobs for Youth public-service announcements, and to print ads asking employers for jobs. Commercials were aired between innings of New

York Yankee games. Transit posters were used, and frequent press events were held.

Miscellaneous

The New York project was probably the largest in the country. The undertaking is administered by a different company each summer, on behalf of the New York City Partnership. The 1982 coordinator was Citicorp (which made use of its branches throughout the city for employer recruitment). In 1983, Philip Morris will administer the program.

Project Coordinator

New York City Partnership, Inc., 200 Madison Avenue, New York, N.Y. 10016.

* * * *

OMAHA

Youth Unemployment	22,598 (14.1 percent[a])
Numerical Goals	None
Youths Employed	310
Private Sector Jobs	310
Community or Agency Jobs made possible through cash contributions	—
Corporate Participants	10

Government Participants

Omaha Finance Department.

Other Participants

Small Business Council of Greater Omaha, Chamber of Commerce.

Employer Recruitment

Prime CETA sponsor, articles in newsletter of Small Business Council, personal contact of CEO's.

Youth Recruitment

School system, public-service media announcements.

Publicity

No specific media campaign, since summer youth employment considered inherently media worthy by project coordinator. Newspapers provided adequate coverage.

Miscellaneous

Most of the work on the program was administered by staff of local CETA sponsor. According to project director: "We principally solicit the funds from the business community here, turn the funds over to the Finance Director for the City of Omaha, and then coordinate with that director and the CETA executive director in the administration of the program. The CETA staff members do such an outstanding job that there is very little for us to do in the area of administration."

Project coordinator donated $150,000 and requested another $100,000 from the business community. In response, a local foundation provided $67,000, and corporations contributed an additional $75,000. Funds were then used to supplement regular CETA program.

Project Coordinator

Corporate Community Relations, Internorth, 2223 Dodge Street, Omaha, Nebraska 68102.

[a] Projected for full year 1982 by Nebraska Department of Labor. The 14.1 percent figure is an average of projections for two age groups: 16 to 17-year olds (18.5 percent unemployment) and 18 to 19-year olds (9.7 percent unemployment).

* * * *

PITTSBURGH

Youth Unemployment	17,000 (20.8 percent)
Numerical Goals	None
Youths Employed	210
Private Sector Jobs	—
Community or Agency Jobs made possible through cash contributions	210
Corporate Participants	25

Government Participants

CETA Sponsor, Parks Department, school system.

Employer Recruitment

Chairman of Private Industry Council addressed business groups and initiated a follow-up letter to corporate CEO's.

Youth Recruitment

School system, CETA sponsor.

Publicity

Newspaper articles, television talk shows, and special events coverage throughout the project.

Miscellaneous

Funds raised by the Private Industry Council were used to employ 41 supervisors, while Community Development funds (moneys made available through the Federal Community Development Block Grant program) were used to employ the 210 youths. Corporations contributed $140,000. Pittsburgh project, late under way, was specifically aimed at cleaning up rubble-strewn lots in city. Over 1,000 city-owned lots, most previously unusable, were cleaned and made available for performing arts and other events. Secondary aim was pruning of city trees. Project for Summer, 1983, will begin earlier, and is placing greater emphasis on private-sector job solicitation.

Project Coordinator

Pittsburgh Private Industry Council, Room 401, City-County Building, Pittsburgh, Pennsylvania 15219.

* * * *

RICHMOND

Youth Unemployment	N.A.[a]
Numerical Goals	1,500
Youths Employed	1,086
Private Sector Jobs	815
Community or Agency Jobs made possible through cash contributions	271
Corporate Participants	300

Government Participants

Richmond Area Manpower and Planning Department, county governments, school system.

Other Participants

Urban League, ten community organizations, YMCA, Chamber of Commerce.

Employer Recruitment

Personal solicitation by PIC members, letters to CEO's, phone bank staffed by community volunteers.

Youth Recruitment

School system, through announcements by school counselors; YMCA.

Publicity

Press conference at the start of the project. Radio and television spot announcements, newspaper articles.

Miscellaneous

Coordinator obtained a small grant to fund 50 percent of the wages for youths working in small businesses. For Summer, 1983, a more formal system of job solicitation was established, and greater emphasis will be placed on recruitment of college students. Monitoring of results will be computerized.

Project Coordinator

Richmond Private Industry Council, 201 East Franklin, Richmond, Virginia 23219.

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[a] According to a survey of 785 high school students in Richmond's East End—a largely black, low-income neighborhood—61 percent of the youths said they could not find a job. However, a survey spokesperson said this figure should be viewed cautiously in light of limitations in administering the survey. Source: Richmond Youth Services Commission, *Youth Needs Assessment: East End.* City of Richmond, February, 1982, p. 52.

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SAN FRANCISCO

Youth Unemployment	23,000 (8.6 percent[a])
Numerical Goals	None
Youths Employed	806
Private Sector Jobs	800
Community or Agency Jobs made possible through cash contributions	6
Corporate Participants	650

Government Participants

State Office of Economic Development, Mayor's Office of Employment and Training (the CETA sponsor).

Other Participants

Several community groups.

Employer Recruitment

Two-week "phone blitz" staffed by 200 community and corporate volunteers calling 6,000 corporations; Mayor's breakfast on St. Patrick's Day for 150 corporate leaders.

Youth Recruitment

School system and community groups register youth for massive "Paint In," a poster-painting competition at City Hall Plaza. Using spray paint on posters, youths created their own graffiti-style advertisements, such as "For a Whale of a Good Worker, HIRE ME" and "9 to 5 Without No Jive—Give James a Chance." The posters, each carrying the central telephone number, were then placed on buses. All the posters were used, but the best ones—selected by a celebrity panel—received special awards. Top prize was a summer job in an advertising firm's art department. The winning poster in 1982 read "Hands Need Work" next to a picture of a hand behind a wire fence.

Publicity

Mayor's breakfast, phone blitz, and paint-in were planned as media events and received broad coverage. Advertising firm that provided the first prize also handled all media contacts on a pro bono basis.

Miscellaneous

According to project coordinator, business community developed increased awareness about local "structural unemployment that goes beyond the problems of summer jobs for youth." Large number of smaller firms contributed funds for internships.

Project Coordinator

San Francisco Private Industry Council, 1748 Market Street, San Francisco, California 94102.

[a] Includes Oakland.

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SEATTLE

Youth Unemployment	17,000 (25.1 percent)
Numerical Goals	250
Youths Employed	276
Private Sector Jobs	—
Community or Agency Jobs made possible through cash contributions	276
Corporate Participants	20

Government Participants

City Department of Human Resources, County Department of Human Resources, Employment and Training Consortium (a city-county corporation serving as prime CETA sponsor), school system.

Other Participants

Private Industry Council, Employment Opportunity Council, and several community organizations.

Employer Recruitment

The CEO of the project's co-coordinator, a major insurance company, personally called other CEO's to request job placements and/or funds. A fund-raising proposal in his name was also sent to area corporations.

Youth Recruitment

Youths who could not obtain regular CETA placements due to government funding cutbacks were referred to the project.

Publicity

Several articles describing the project in area newspapers.

Miscellaneous

Youths were placed either on community projects such as landscaping, greenhouse improvement, gardening, service delivery to senior citizens, and so forth, or in agencies where they performed entry-level clerical tasks. For 1983, a broader publicity campaign is planned, with the aim of finding openings in the private sector. According to the project coordinator, job experience in private companies tends to be more useful to the youths.

Project Coordinators

SAFECO, SAFECO Plaza, Seattle, Washington 98185. Also, Department of Human Resources, 400 Yesler, Seattle, Washington 98104.

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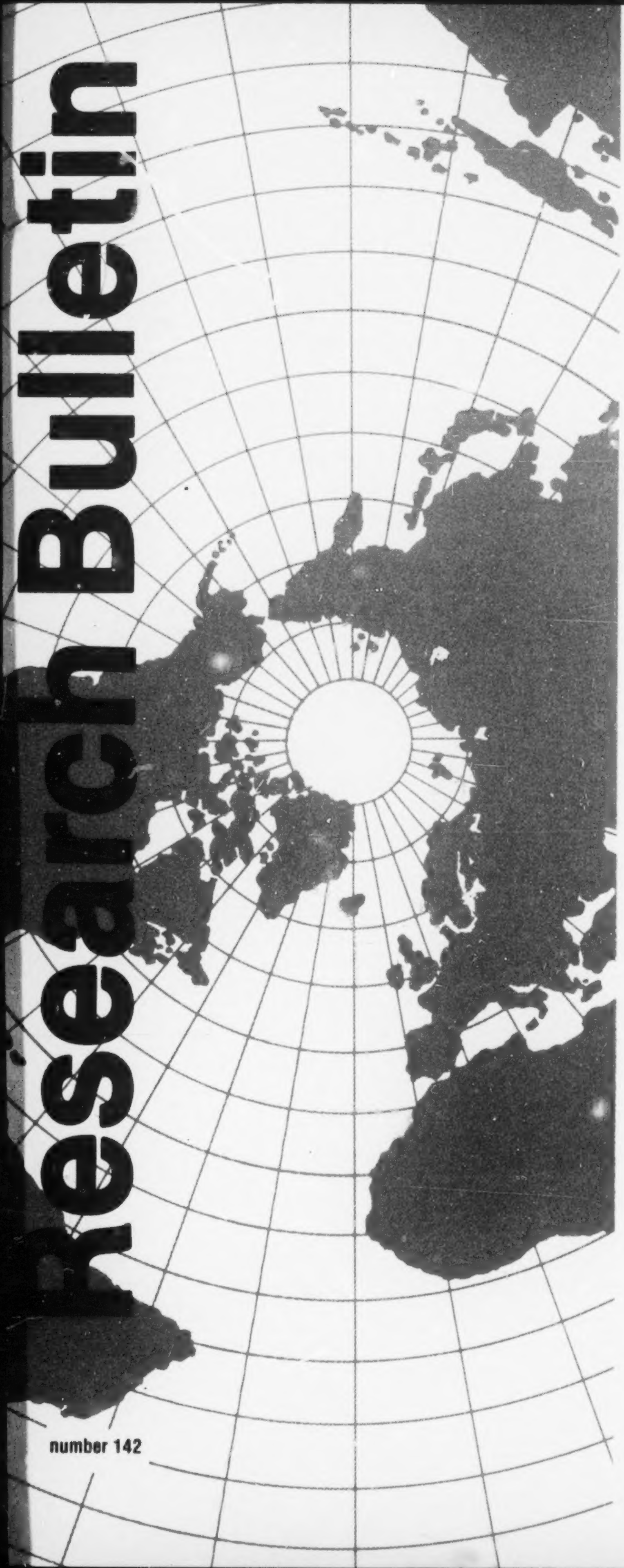

Research Bulletin

number 142

Japanese Investment in the United States:

An Opinion Survey of Elected Officials

by
Audrey Freedman
and
David Bauer

The Conference Board

SOURCE OF DATA

The Conference Board surveyed 256 governors, senators and representatives whose state or district contains one or more Japanese-owned manufacturing companies. The list of Japanese-owned companies came from the Japan External Trade Organization. Responses received from 64 elected government officials between October, 1982, and March, 1983, provided the data for this report. Thirty-three of the respondents were governors; fifteen were senators; and sixteen were representatives. There were 34 states represented in this survey.

The Conference Board asked the elected officials the following questions:

1. "Do you think a Japanese business presence is beneficial to the economy of your state?
2. "What are the benefits or drawbacks?
3. "Would you like to see more capital investment by Japan in your state—and if so, in which industries or sectors in particular?
4. "Do you think direct investment from Japan helps reduce trade conflict?

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JAPANESE INVESTMENT in the United States is welcomed, in nearly unqualified terms, by elected state and federal officials. Many states actively seek foreign investment, viewing the capital inflow as a stimulus to technological advance and employment of the local labor force. To the extent that the Japanese facilities involve high technology, however, they are less likely to be labor intensive—particularly of production workers. The elected officials suggested that foreign investment in U.S. production facilities tends to reduce trade conflict, though some responses called for reciprocal openness from Japan on both imports and capital investment.

The Benefits of Japanese Investment

Employment is the main beneficial effect of incoming Japanese capital, according to elected officials (see Table 1). In some cases, "jobs" were cited as the only benefit. Some answers described job creation rippling through the local economy and including domestic employers as well:

> "First, new investment increases job opportunities for Pennsylvania. Second, new investment encourages the establishment and/or growth of complementary businesses which will also increase job opportunities. For example, a manufacturing plant might require certain raw materials, which could be provided by nearby suppliers. Additionally, service industries (supermarkets, banks, etc.) would evolve to provide services for those employed by the firm."

Two respondents noted somewhat ruefully that Japanese investment in heavy industries (such as steel) had "retained" jobs in a shrinking industry. State governors cited a benefit that they mentioned in conjunction with employment, namely, additions to the local tax base. For example:

> "The increased investment adds to the capital stock, which provides the basis for maintaining or accelerating economic growth. This results in the creation of additional tax revenues, jobs and income for residents and helps the state's balance of trade by increasing exports from California to the world's economy."

Stimulation of exports, either from the state or from the United States, was mentioned by nine respondents. In some cases, such exports might be raw materials—such as coal, lumber and agricultural products—exported for processing elsewhere. In other cases, Japanese capital may generate U.S.-based transformation of our raw materials into finished products for domestic and export markets. Such an investment in U.S. processing and manufacturing would be warranted by the cost savings (especially in transportation) of using natural resources on site, or within the country of origin.

However, a broad resource base alone will not "create" manufacturing jobs. It is necessary that U.S. processing and fabrication using those resources be sufficiently cost-efficient to retain the comparative advantage through the stages of manufacturing. If "made in the U.S.A." means poorly made or expensively made, then Japanese (and others, including Americans) will invest in manufacturing facilities located elsewhere.

For this reason, three of the benefits cited are critical to further job growth: (1) the introduction of better production-management techniques, (2) introduction of new technology, and (3) training the U.S. work force. Management innovation was described as "new ideas and new approaches to business and development" and "new methods of production." One West Coast congressman commented: "The long-haul attitude of Japanese firms is something U.S. companies should have. Our managers

Table 1: Beneficial Results of Japanese Investment

Specified Benefit	*Frequency of Mention*
Employment	62
Capital inflow	19
Introduce new business or production management techniques	15
Add to local tax base, revenues	13
Technology transfer to the United States	11
Add to mutual understanding, add diversity of culture	11
Stimulates local (or U.S.) export	9
Provides healthy competition	7
Procurement in United States, stimulates complementary enterprises	5
Decreases U.S. imports	5
Attracts other (Japanese) firms to locality	5
Diversifies industrial mix	4
Trains U.S. work force	3

need educating." There were some specific reference to employee development, such as:

> "Japanese investment, in particular, offers the potential of introducing new management styles to American workers. This could, potentially, increase productivity."

The new management style includes investment in the U.S. human-resource base with which the Japanese managers work:[1]

> "Besides the obvious economic benefits that accrue to a community that attracts a new industrial facility, the Japanese have a strong concern for employee skill development and growth, and effective labor-management relations,"

according to one respondent.

By acquiring new technology, the United States can retain manufacturing that otherwise would migrate to countries with lower costs. With Japanese capital come Japanese engineers and managers—carrying their know-how, according to eleven respondents. More generally, when industries in which more Japanese investment is desired were listed (see Table 3, page 7), a potential technological contribution seems to have been the paramount attraction. Americans hope, as one respondent put it, that "exposure to Japanese production systems and management techniques may lead to improved productivity."

Japanese may have some reservations about sharing, and thus giving up, some of their technological advantage. In an article urging Japanese industry to do just this, technology expert Masanori Moritani of the Nomura Research Institute suggested that it would be difficult:

> "No other nation can equal Japan in enthusiasm for the absorption, accumulation, and improvement of foreign technology. It is highly unlikely that any other country would be able to upgrade imported technology to the point where it would surpass that of the donor country. The West has never shown any great aptitude for improving and upgrading."

Moreover, he added:

> "Japan has a tradition of giving more weight to production than to development, resulting in great attention being paid to the production end of industry. No such trend is seen in either the West or the newly industrializing states. Thus even if other countries initiate production on a development and design level equivalent to Japan's, there is no reason to suppose that the products produced will ever catch up with their Japanese counterparts in terms of quality and reliability."[2]

Drawbacks

Very few drawbacks to Japanese investment were cited. Four respondents were concerned that the newcomers might outcompete U.S.-owned firms. One said:

> "The obvious drawback would involve a Japanese plant investment in Wisconsin which is so much more competitive than similar existing firms in the state, for whatever reason, that the 'Wisconsin natives' would lose a large share of their domestic market to the Japanese firm. The result would be a net loss to the state of employment and healthy firms."

Competition was seen as a *drawback* by four respondents and a *benefit* by seven. The ones who saw beneficial effects thought that the introduction of more competition would invigorate American firms, not overwhelm them. One said, for example:

> "New products introduced by Japanese companies stimulate the competitive acumen of our indigenous industries."

Another said Japanese investment

> "expands the competition not at the expense of, but rather with the cooperation of, American workers."

One response expressed concern that a Japanese business presence in defense industries might not be in the national interest. In the area of defense-related research and development, such as electronics, it might be imprudent to allow U.S. firms to be replaced or weakened by foreign-owned companies. Some other drawbacks cited (once each) were: gives Japanese access to U.S. technology; creates reliance on foreign enterprise; establishes foreign ownership of "our" agricultural real estate; creates a potential for "political control" and pressure; draws profits out of the United States. Two respondents generally observed that Japan has not welcomed U.S. exports or U.S. capital reciprocally.

Why are Japanese Companies Here in the First Place?

Spending by foreign firms to build, expand or acquire manufacturing facilities in the United States is growing more rapidly than either the domestic or foreign investment outlays of U.S. companies. The cumulative value of investments in the United States by foreign manufacturing companies currently exceeds $30 billion. The latest official data available, however, are for 1981 (see Table 2). The rate of growth has slackened since 1980 because of recession in this country and abroad. While foreign investment during the remainder of the decade may not maintain its previous growth rate, the foreign presence will continue to expand appreciably.

Investments in the United States by Japanese companies have accelerated faster than those of any other major industrial country. Investments in "brick and mortar" by the Japanese were virtually nonexistent prior to 1970. Therefore, despite the rapid increase, the current value of Japanese *manufacturing* investments—estimated at $1.3 to $1.5 billion—is relatively small. To date, the trading companies of Japan have been that country's major overseas investor, and their U.S. holdings of $4 billion are exceeded only by those of the British. Conference Board data indicate that the recession has not slowed Japanese investment to the same extent as investment from other countries. The rapid growth of Japanese investment vis-a-vis that of other countries is expected to continue throughout the 1980's.

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[1] The Conference Board reported on this investment in Audrey Freedman's, *"Japanese Management of U.S. Work Forces"* Research Bulletin No. 119, 1982.

[2] Masanori Moritani, "A Technological Strategy for Import Expansion," *Economic Eye,* published by Keizai Koho Center, Tokyo, June, 1982, p. 28.

This growth will continue despite the frequent reluctance of Japan to invest in the United States and the often defensive nature of these investments (see box). Until the late 1960's, investment was limited by the Japanese government because of balance-of-payments considerations, and by Japanese firms because of their emphasis on serving the domestic rather than the foreign market. By 1971, however, the Japanese government was encouraging foreign investment as a means of reducing what the 1976 benchmark study of the Commerce Department on foreign firms called an "embarrassing large" official foreign-exchange reserve.[1] At the same time, Japanese firms began to locate manufacturing facilities outside the country, although their motives for doing so were distinctly different from those of most other firms entering the U.S. market.

In general, the early investments were supportive of Japanese exports. These investments were made to establish U.S. marketing and service networks; frequently with the acquisition of a U.S. distributor. Later investments were made to establish manufacturing facilities, but in the words of the Commerce Department study, this was done "with some reluctance as a defense measure of the last resort." Most Japanese companies would have preferred to continue the policy that had been so successful in the 1950's and 1960's, that is, produce in Japan and export to foreign markets.

A JAPANESE POINT OF VIEW: REASONS FOR INVESTING IN THE UNITED STATES

"Reasons for advancing overseas could be broken down into five categories: (1) investment for the purpose of getting around import restrictions (tariff barriers or import quotas) adopted by foreign governments by replacing exports with products manufactured locally; (2) direct investment for the purpose of opening up new markets; (3) switches to overseas production occasioned by Japan's loss of comparative advantage in competitiveness following increases in domestic wages or material costs; (4) investment for the purpose of promoting triangular trade through exports to third-country markets; and (5) investments made as part of technical cooperation projects."[1]

[1] Kazutoshi Koshiro, "How Overseas Investment Affects Employment at Home," *Economic Eye*, published by Keizai Koho Center, Tokyo, June, 1982, p. 34.

Table 2: Foreign Direct Investment Position, Selected Countries, in the United States at Year-end 1981
(millions of dollars)

	All Countries	*Canada*	*Germany*	*United Kingdom*	*Switzerland*	*Japan*
All industries	$89,759	$12,212	$7,067	$15,527	$4,368	$6,887
Manufacturing total	29,533	5,787	2,917	5,910	2,731	1,111
Food products	4,791	2,380	25	528	550	57
Chemicals	8,488	162	1,855	1,634	1,243	266
Metals	4,325	1,172	170	962	338	262
Machinery	4,626	1,044	605	585	230	319
Other	7,303	1,030	263	2,202	369	207
Trade	17,734	1,285	2,271	4,362	607	4,128
Finance	7,448	398	301	2,250	225	1,093
Insurance	5,896	402	764	2,360	641	217
Real Estate	4,564	912	183	436	−1	131
Petroleum	17,813	1,547	56	−212	29	7
Other	6,770	1,880	574	420	135	201

Source: U.S. Dept. of Commerce *Survey of Current Business*, August, 1982, Table 10.

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[1] *Foreign Direct Investment in the United States*, U.S. Department of Commerce, April, 1976.

By the beginning of the 1970's, a number of factors combined to threaten Japan's growth in these markets, notably the U.S. market. The devaluation of the dollar in 1971 and 1973 raised prices of imported goods to Americans, and lowered the cost of building or buying U.S. production facilities. U.S. protectionism grew. The merchandise trade deficit of 1971 was the first experienced by this country in over 80 years. Subsequent and larger deficits gave rise to increased tariffs and quotas on items such as ball bearings, textiles, motor vehicles, and various steel products. The imposition of tariffs and quotas, coupled with periodic "voluntary" agreements by the Japanese to limit exports of television sets and automobiles, and frequent charges of dumping had ramifications far beyond the individual products involved. Japanese exporters of any product that achieved large market shares in this country had to consider the possibility that U.S. restrictions would limit sales, a consideration that led many firms to establish U.S. production facilities.

Conditions at home also made overseas expansion attractive. Japan's virtually complete dependence on imported oil made a U.S. location more attractive to large energy consumers. Producers of chemical fertilizer products, metal fabricators, and pulp and paper producers sought U.S. sites as pollution controls and a scarcity of land in Japan curbed expansion of facilities; growing scarcities of workers also throttled domestic expansion plans of many firms.

Location

Roughly 300 Japanese firms had manufacturing plants in the United States at the end of 1981. The vast majority of these firms owned 50 percent or more of their 428 U.S. subsidiaries. The Japan Economic Institute, which monitors the activity of Japanese firms on a regular basis, lists 105 of these subsidiaries in California, notably in the Los Angeles area. Data compiled by both The Conference Board and the Institute show that Japanese companies do not exhibit the marked preference for Sunbelt locations commonly ascribed to them. While Georgia and Tennessee have attracted a large number of firms, so also have the "smokestack" states of New Jersey, Michigan, Illinois, New York, Pennsylvania and Ohio (see box).

The success of traditional manufacturing states in attracting Japanese (and other foreign) companies rests upon several factors, one of which is the availability of labor. Japanese producers of industrial products and supplies such as bearings, machine tools, power equipment, medical equipment, control cables, and other goods have chosen these states in no small part because of their supplies of experienced industrial workers.

STATE OUTREACH PROGRAMS

State offices of economic development endeavor to attract capital in the United States, and increasingly from foreign sources as well. At least 17 states have offices in Japan (usually in Tokyo) to promote trade and to market the state as a site for U.S. operations. In addition, some U.S. cities and regions maintain Japanese offices.

Michigan's office in Tokyo was opened ten years ago, but this move was more recent for most states. For example, Pennsylvania responded:

"We have established foreign trade and investment offices in Western Europe, Tokyo and Mexico City. Since the offices were established a little over a year ago, foreign manufacturing operations were attracted to Pennsylvania as a direct result of the efforts of these trade representatives. Currently, there are over 430 foreign-owned firms located in Pennslyvania that provide over 95,000 jobs for Pennsylvanians. In addition, our state has expanded its industrial advertising campaign to include ads in foreign business journals. According to The Conference Board, Pennsylvania ranked fourth among the states in attracting foreign investments between 1979 and 1981. Pennsylvania is proud of these accomplishments and will continue efforts to inform foreign business that Pennslyvania is a good place to do business."

The Governor of North Carolina said:

"We have a North Carolina office in Japan. In North Carolina we have an industrial developer who speaks fluent Japanese. He devotes full time to recruiting for Japan. Japanese investments in our state represent their latest technology."

Maryland's program to attract Japanese investment extends beyond its office in Tokyo:

"To lay the foundation of good will and to establish closer ties with the international business community, Maryland has recently established sister-state relationships with Japan's Kanagawa Prefecture, China's Anhui Province, and France's Region Nord Pas De Calais. The sister-state programs involve educational exchanges, cultural exchanges, and mutual cooperation in industry and foreign trade."

Nevertheless, many Japanese firms in the Sunbelt produce or assemble television sets, fans, plastic parts, textiles and other items whose production is highly automated or does not require large numbers of experienced and highly trained workers. Thus, communities may not always be able to obtain substantial increases in employment *and* gains in labor productivity and technology as a result of Japanese investment, as is suggested by some of the survey responses.

Labor, of course, is only one of the factors that influence plant-location decisions. The availability of agricultural products was a major factor in Kikkoman's decision to locate its soy sauce plant in Wisconsin, and similar considerations brought seafood processors to Alaska, paper and wood companies to Washington, and cotton thread companies to South Carolina. An existing concentration of firms in the same or related industries (including venture capital and R&D companies) brought Japanese producers of semiconductors, microprocessors and other electronic parts to northern California. Access to major markets offered by a location in New York or Illinois has been a pivotal factor for companies making both consumer and industrial products.

Japanese firms are more likely than are firms from other countries to build, rather than to buy, manufacturing facilities. In recent years however, a growing familiarity with the U.S. market and the size and structure of U.S. industry has made companies slightly more easy with the prospect of buying U.S. plants. The recent $52 million purchase of a Firestone Tire and Rubber plant in Tennessee by Bridgestone Tire and the $150 million investment by Toyota in a joint venture with General Motors to produce autos in a renovated GM plant in California would not likely have occurred 10 years ago, although then the Japanese were not under such intense pressure to limit their auto exports.

In Which Industries Is More Investment Sought?

Elected officials want more Japanese-owned business in the U.S., particularly high-technology operations. One-third of the responding officials named "high-technology" as an industry in which Japanese investment is sought. Sixteen responses identified electronics, robotics, biotechnology and so forth, in further specification (see Table 3). It seems likely that responses that identified such industries as auto parts, chemicals, and metals may also have considered a Japanese "high" technology contribution in framing their preferences for Japanese activity.

The emphasis on technology appeared in every answer. For example, a Congressman from Wisconsin wrote:

> "I would encourage Japanese investment here, with no ban or restriction on any particular field but with particular encouragement for modern or hi-tech or frontier industries and services."

Table 3: Industries in Which Japanese Investment is Desired

Industry	*Number of Times Industry was Mentioned*
"High technology" industries	22
Biotechnology	1
Electronics	9
Computers	1
Robotics	4
CAD/CAM (Computer Assisted Design/ Computer Assisted Manufacturing)	1
Aerospace	1
Transportation equipment	3
Autos or auto parts	8
Motorcycles, bikes	1
Small farm equipment	1
Metals	5
"Heavy industries"	2
Manufacturing	3
"Light" manufacturing	2
Consumer products	3
Chemicals	3
Minerals	1
Plastics	1
Oil	1
Pharmaceutical	4
Agricultural	4
Forest products	2
Food	6
Ocean and marine	2
"Services"	2
Research	2
Banking	1
Insurance	1
Transportation service	1

The Governor of Pennsylvania seeks both output of high-technology "products" and their use in manufacturing processes:

> "In particular, the Commonwealth has been encouraging the establishment of production facilities for advanced technology products by Japanese firms as well as other manufacturing facilities which use advanced technology, such as robots."

When respondents indicate a desire for more advanced technology industries, and also cite technology transfer as one of the benefits of Japanese investment here, they are identifying capital-intensive sectors. Yet nearly every response referred to jobs—employment—as the major benefit sought. *The more automation the Japanese bring the less labor-intensive will be their U.S. operations.* This would be true even of service industries. Moreover,

Japan Firm to Assemble Railway Cars in U.S.

Tokyu Car Corp., which has won contracts to supply 93 electric railway cars to Buffalo and Cleveland, is now seeking plants near these cities to assemble the cars.

The Japanese rolling stock maker won an order from the Niagara Frontier Transportation Authority of Buffalo for 33 electric cars and another contract from the Greater Cleveland Regional Transit Authority for 60 cars.

Two prototype cars are scheduled to be shipped to Buffalo this month, but the remaining cars on order from the city are due to be assembled in the U.S. More than 51% of the parts installed on the Japanese chassis are to be procurred locally.

The cars ordered by Cleveland, scheduled to be delivered late this year, will also be assembled at a U.S. plant.

Two other Japanese rolling stock makers may also be looking for U.S. assembly plants soon. Kawasaki Heavy Industries Ltd. is scheduled to supply 325 subway cars to the Metropolitan Transportation Authority of New York. Hitachi Ltd. is to supply 30 subway cars for the Metropolitan Atlanta Rapid Transit Authority of Georgia. Both are expected to assemble the cars in the U.S.

Source: *The Japan Economic Journal*, March 15, 1983, p. 9.

Japanese firms operating here are likely to be highly automated for another reason: poor quality of workmanship or high wage levels of U.S. workers.[4]

Reasons for investment in the United States, from a *Japanese* point of view, will probably determine the target industries no matter what efforts the states make to influence those choices. One of those (Japanese) inducements is availability of raw materials. Two responses addressed this "pull" effect, differently. One said that investment was wanted in "high-tech industries, agricultural products processing facilities, and forest products processing facilities." The other:

> "We are anxious to attract further Japanese investment. But rather than see more traditional Japanese concentration on raw materials (lumber, wheat and metal products), we would welcome investment in high technology, such as assembly plants for electronic consumer goods, and also in other high-technology 'sunrise' industries."

A clear inducement to the Japanese to invest in U.S. facilities is the avoidance of trade barriers. Whether these are quotas, or "Buy American" restrictions on the purchase of foreign-made equipment, or tariffs, they can be eluded by producing in the United States. Thus "voluntary" quotas on imported, Japanese-made autos created pressure on Honda, Nissan and now Toyota to assemble (if not entirely manufacture) in the United States. Auto parts manufacture will follow, partly because of the possibility of domestic-content legislation that is now before the Congress.[5] Thus the rising incidence of trade restrictions on such products as autos, electronics and steel may force some defensive investments by Japanese manufacturers in U.S. production facilities. This is one of the purposes of the supporters of domestic-content legislation: "It would curb the alarming rise in foreign sourcing by U.S. companies, while inducing foreign-based companies to invest here."[6]

By February, 1983, however, all four of the biggest auto importers (Toyota, Nissan, Honda and Volkswagen) had U.S. production facilities. An unidentified House staff member said to the New York Times: "If the aim of domestic content legislation is domestic production, then this has to mean less steam for the bill."[7]

Modified "Buy American" clauses in local, state and federal contracts might also bring limited Japanese involvement. For example, a subway-car contract might be let to a foreign firm as the lowest bidder, yet contain clauses requiring a certain portion of components or materials, or some assembly, to be made in the United States (see box for example). The forced nature of such arrangements suggests that the life of an investment so generated will be limited to the completion term of the contract. The potential benefits of this kind of investment, then, would not extend to the list in Table 1.

Trade Conflict

Nearly all the elected officials responded that direct investment from Japan helps to reduce trade conflict. Some of positive responses emphasized international understanding. For example:

> "The more we can understand the Japanese, the less conflict there will be. Japanese job-producing investments may serve to encourage U.S.—Japanese ties by creating goodwill in the population."

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[4] Japan External Trade Organization (JETRO), *Japanese Manufacturing Operations in the United States: Results of the First Comprehensive Field Study*, September, 1981.

[5] The Fair Practices in Automotive Products Act (H.R. 1234) would require a specified proportion of the components of autos sold in the United States to be manufactured here.

[6] Statement of Douglas A. Fraser, President of the UAW, before the House Ways and Means Trade Subcommittee on Auto Content Bill, (H.R. 5133), September 21, 1982.

[7] *New York Times*, March 14, 1983, Section D.

Most, however, referred to the economic issues: trade imbalance and U.S. unemployment. Some of these are excerpted below:

> "I feel there is less opposition to Japanese imports when partial manufacture and/or assembly takes place in the United States."

> "More voluntary, direct investment from Japan may be the best way to reduce the serious trade friction between our two countries, and help to avert protectionist legislation that can only be harmful in the long run."

> "Having Japanese goods produced in the United States leads to lower Japanese trade surpluses vis-a-vis the U.S. market. Much of the friction related to the 'theft' of U.S. jobs could be reduced as those jobs would now be in the United States."

> "It's the loss of jobs by Americans, not the trade imbalance, that is so irritating."

A few respondents raised the issue of Japan's import barriers to U.S. goods, for example:

> "Investment could be a factor in reducing trade conflict between the two nations. But one must recognize that equitable trade is a two-way street, and that firms in my district should have an opportunity to compete on an equal footing in Japan's domestic market."

Some reservations about Japanese direct investment were expressed by these legislators. One said:

> "Whether direct investment from Japan reduces trade conflict may depend largely on the financial behavior of the Japanese firms. To the extent that profits earned in the relatively open markets of the United States are repatriated to the Japanese parent companies rather than reinvested here, Japanese investment in the United States may exacerbate trade conflict.[8] This will be true as long as there is disparity between access to investment in the two countries."

Another said that trade conflict would be reduced only if Japanese investment does not "discourage growth of U.S.-owned or controlled industry." One response suggested more information would be useful, when he commented that investment by Japanese would mitigate conflict only "when the benefits of that investment are clearly spelled out and not misunderstood."

One governor cautioned against using protectionist, or other politically inspired moves, to attract capital investment:

> "We would prefer that the investment were made on the basis of sound economic decisions, rather than political ones. This would add much more to the long-term stability of the investments."

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[8] Japanese incorporated affiliates in the United States reinvested 90 percent of their 1981 earnings here. European affiliates reinvested 62 percent; Canadian affiliates, 49 percent. *Survey of Current Business*, August, 1982, Table 5, p. 34.

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Research Bulletin

Incentive Stock Option Plans

by Harland Fox

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The climate for granting stock options to key executives has not been better for a good many years. The stock market has been cooperating since August, 1982. In addition, a year earlier, Congress created a new statutory option—the "incentive stock option" (ISO)—which again provides that an option recipient pays no tax at the time the option is exercised; and, if the option is held for a specified length of time, the bargain element is taxed as a long-term capital gain.[1]

By May, 1982, at least 60 percent of a sample of 531 manufacturers listed in the *Fortune* 1,000 industrials and 30 percent of a group of 526 nonmanufacturers had granted new ISO's or planned to in the near future.[2] This *Bulletin* describes the basic characteristics of incentive stock option plans among 189 companies that have granted new ISO's since August 12, 1981. (See box for description of the sample.)

Profile of the Incentive Stock Option

Under a nonstatutory (nonqualified) stock option, an option recipient is taxed at the time the option is exercised: The difference between the option price and the fair market value at the time of exercise is taxed as personal service income. The company receives a corresponding tax deduction for this amount.

Under a statutory (incentive) stock option, the company is allowed no tax deduction but, as already indicated, there are no tax consequences to the executive when the option is exercised. The executive is taxed at capital-gains rates after meeting a specified holding period.[3] To get this special tax treatment an incentive stock option must meet the statutory requirements described below.

The Plan

The option must be granted under a plan approved by the stockholders within 12 months before or after the date of adoption of the plan.

The option must be granted within 10 years from the date the plan is adopted or approved by the stockholders, whichever is earlier. That is, the maximum term of the plan is 10 years.

The plan must spell out the total number of shares which may be issued under options.

The plan must designate the employees, or class of employees, eligible to receive options. However, the typical designation, "key employees," meets this definition.

Terms of the Option

The option price must not be less than the fair market value of the stock at the time it is granted.

The option must be exercised within 10 years of the date of grant.

The option is not exercisable until all ISO's previously granted have been exercised in full or allowed to expire by lapse of time. That is, lower priced, more recent options are blocked by options previously granted at higher prices by this requirement for "sequential exercise."

About the Companies

In the Spring of 1982, The Conference Board obtained information about stock option plans from approximately 1,200 companies; these 1,200 companies included a sample of:

- manufacturers from the *Fortune* 1,000 industrials
- commercial banks with total deposits of $300 million or more
- insurance companies with premium income of $50 million or more
- retailers with sales of $50 million or more
- construction companies from the 200 largest
- gas & electric utilities listed on the New York Stock Exchange.

In late 1982, all companies in the above groups who had granted incentive stock options or both incentive stock options and nonqualified stock options after August 12, 1981 were asked to participate in this study.[1] The total eligible companies and the number that provided data are shown below:

Type of Business	*Total Eligible*	*Participants*	
		Number	*Percent*
Manufacturing	210	145	69%
Commercial banks	32	17	53
Retail trade	24	12	50
Insurance (stock)	8	7	88
Construction	6	3	50
Gas & electric utilities	5	5	100
Total	285	189	66%

[1] Harland Fox, *Top Executive Compensation, 1982 Edition*. The Conference Board, Report No. 827, 1982, pp. 1 and 7.

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[1] The ISO was created by Section 251 of the Economic Recovery Tax Act of 1981 (ERTA) and is governed by Section 422A of the Internal Revenue Code. The IRS has not yet published final regulations, but guidance in interpreting the ISO rules has been published in the *Federal Register* 61839 (December 21, 1981).

[2] Harland Fox, *Top Executive Compensation, 1982 Edition*. The Conference Board, Report No. 827, 1982, p. 8.

[3] It should be noted that ISO's exercised after December 31, 1982, create an item of tax preference for purposes of a new alternative minimum tax that can affect very highly paid executives.

The value of individual awards at the date of grant cannot exceed $100,000 per calendar year, plus unused "carryovers." Carryovers are computed annually and equal one-half the amount by which $100,000 exceeds the amount of option for the year. The carryover may be accumulated and used in any of the three succeeding calendar years.

The option is not transferable except by will or the laws of descent and distribution; and, during the lifetime of the recipient, the option is exercisable only by the option recipient.

Company shares already owned by option recipients may be used to purchase ISO's; that is, stock-for-stock exercise is permitted.

Stock appreciation rights (SAR's) are permitted.

The Option Recipient

The option recipient must be an employee of the corporation (or a subsidiary) at all times during the period beginning with the date of grant and ending three months before the date of exercise (or one year before the date of exercise if disabled).

An employee is ineligible for benefits of an ISO if the employee owns more than 10 percent of the voting power of all classes of company stock. However, this limitation does not apply if the option price is 110 percent or more of the fair market value at the time of grant, and the option term is no more than five years.

To receive the tax benefits of an ISO, the option recipient cannot dispose of the stock within two years of the date of grant, nor within one year of the date of exercise. If the option recipient sells the stock during this holding period (a disqualifying disposition), the option gain is taxed as ordinary income and is deductible by the company.

Relationship to Nonqualified Options

Only 29 of the 189 companies in this study have a stock option plan that provides *only* for grants of incentive stock options; 19 of these are new plans and 10 are old plans modified to grant only ISO's in the future. All of the other companies have plans that allow both ISO's and nonqualified options to be granted.

The most obvious role for nonqualified options is to grant them when the desired value of the option is greater than the $100,000-per-year limit imposed on ISO's. With the exception of 14 companies, this is the way that nonqualified options have been used to date. In seven companies, option recipients make their own choices between ISO's and nonqualified options; in four other companies the typical award is a 50-50 split between ISO's and nonqualified options and in three companies *only* nonqualified options are given to lower paid employees, although higher paid executives can receive both ISO's and nonqualified options.

Over the longer term, some companies may use nonqualified options to overcome the "blocking" that sequential exercise of ISO's creates. For example, if there were ISO's outstanding at $50 per share but the market price was $25 when the company wanted to grant new stock options, nonqualified options might be granted so that the old ISO's would not block the exercise of the new grants. However, this process has some of the overtones of "cancelling" prior options and may suggest to shareholders and the general public that management does not expect stock prices to reach the ISO level for a good many years.[4]

Who Participates

Perhaps the most persistent question about stock option plans is how far down into the organization they go. The general answer to this question is illustrated in Chart 1, which shows the lowest of four organizational levels at which at least *some* managers are granted incentive stock options.[5]

At one extreme, 12 (6 percent) of the companies grant options *only* to the top management group, essentially to those executives who report to the chief executive officer and the chief operating officer. Eight of these plans grant options to fewer than 20 executives; none covers more than 75.

At the other extreme, 16 (8 percent) of the plans reach down into the first level of supervision; that is, at least *some* first-line supervisors regularly receive stock options. Only one of these companies expects to grant options to *all* first-line supervisors. Two others expect to grant options to about half of their first-line supervisors, and another three, to 20 to 30 percent. The other three expect to grant options to 10 percent or less of their first-line supervisors.

In a word, few first-line supervisors are likely to receive incentive stock options. Almost all plans exclude them entirely and, among those that reach down this far, most do not grant options to a sizable proportion of first-line supervisors.

As Chart 1 illustrates, the remaining plans are split about evenly between those that reach only into the key-

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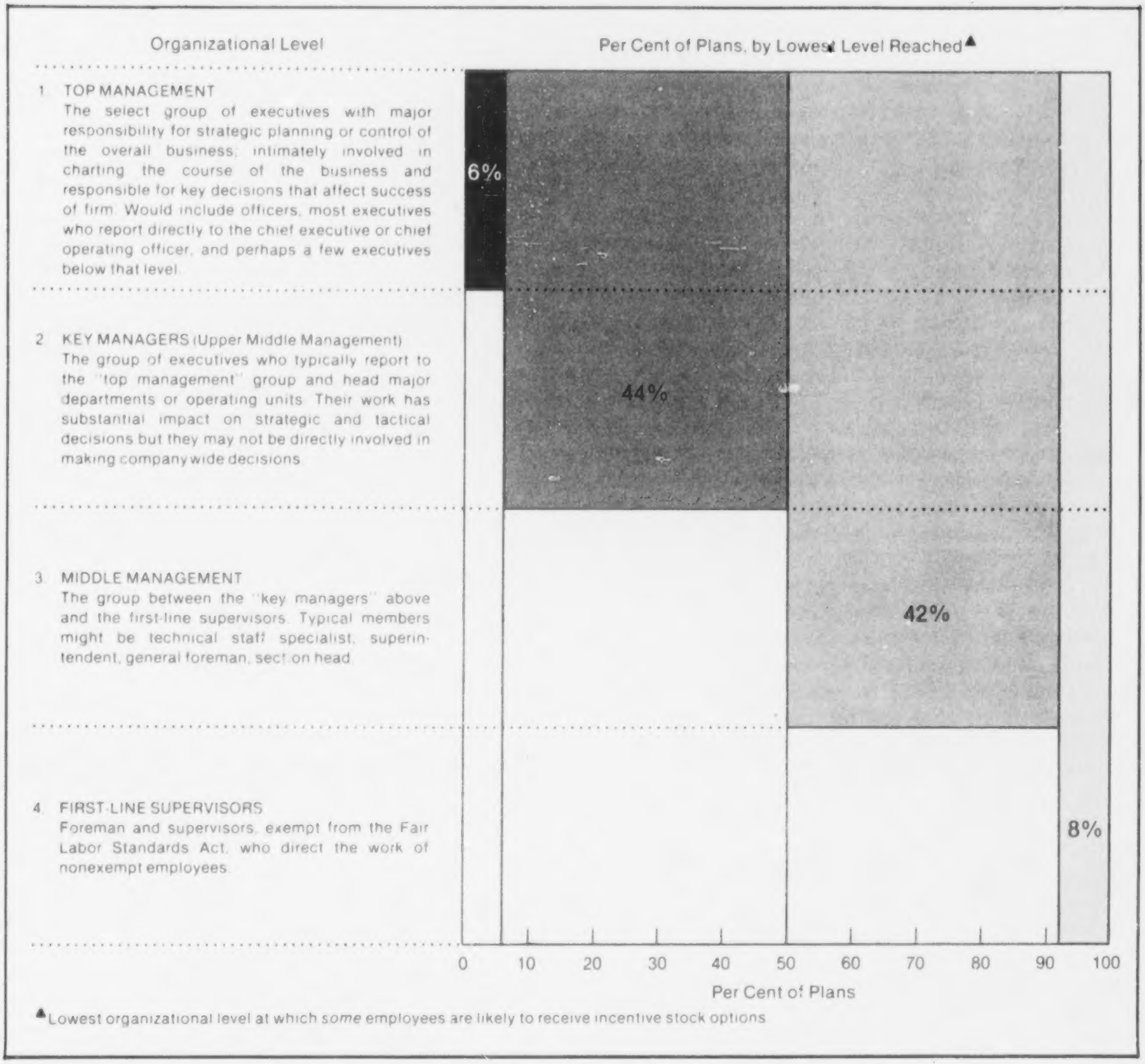
[4] Nonqualified options also may be better than ISO's for highly paid executives subject to the new alternative minimum tax. See Christopher L. Hartwell, "Impact of the New Alternative Minimum Tax on Employee Stock Options," *Taxes*, June, 1983, pp. 407-412.

[5] The definitions of each organizational level as shown on the chart were submitted to the cooperating companies that were asked to indicate the approximate proportion of executives at each of those levels who would be likely to receive options.

Chart 1
Incentive Stock Option Plans, by Organizational Level of Participants



1. TOP MANAGEMENT
The select group of executives with major responsibility for strategic planning or control of the overall business; intimately involved in charting the course of the business and responsible for key decisions that affect success of firm. Would include officers, most executives who report directly to the chief executive or chief operating officer, and perhaps a few executives below that level.

2. KEY MANAGERS (Upper Middle Management)
The group of executives who typically report to the "top management" group and head major departments or operating units. Their work has substantial impact on strategic and tactical decisions but they may not be directly involved in making companywide decisions.

3. MIDDLE MANAGEMENT
The group between the "key managers" above and the first-line supervisors. Typical members might be technical staff specialist, superintendent, general foreman, section head.

4. FIRST-LINE SUPERVISORS
Foreman and supervisors, exempt from the Fair Labor Standards Act, who direct the work of nonexempt employees.

▲Lowest organizational level at which *some* employees are likely to receive incentive stock options.

manager group (upper middle management) and those that go below this into lower middle management, but not as far down as the first-line supervisor. In general, almost all of the key managers as a group are likely to receive stock options; but not all middle managers are likely to. Half of the plans do not cover middle management at all and, among the plans that do, at least one-third expect to grant options to fewer than half of the lower middle-management group.

Salary Level

Another general measure of how far into the organization the stock option plan reaches is the salary level of the *lowest paid* participant. As Table 1 indicates, the median salary of the lowest-paid option recipient is $43,000 in the 180 companies; the middle half range between $33,000 and $54,000.

Of course, the salary of the lowest-paid optionee tends

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Table 1: Salary of Lowest-paid Option Recipient, by Plan Coverage

Salary of Lowest-paid Option Recipient	Total Plans		Plans According to Lowest Organizational Level Reached[1]							
			Top Management		Key Managers		Middle Management		First-line Supervisors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
$75,000-$100,000	10	6%	3	25%	7	9%	—	—	—	—
65,000- 74,000	9	5	—	—	9	11	—	—	—	—
60,000- 64,000	11	6	2	17	6	8	3	4%	—	—
55,000- 59,000	10	6	2	17	6	8	2	3	—	—
50,000- 54,000	27	14	3	25	16	20	8	11	—	—
45,000- 49,000	19	11	1	8	9	11	9	12	—	—
40,000- 44,000	25	14	1	8	12	15	12	16	—	—
35,000- 39,000	14	8	—	—	1	1	10	14	3	19%
30,000- 34,000	26	14	—	—	6	8	14	19	6	38
25,000- 29,000	16	9	—	—	7	9	8	11	1	5
15,000- 24,000	13	7	—	—	—	—	7	10	6	38
Total[2]	180	100%	12	100%	79	100%	73	100%	16	100%
Median Salary	$43,000		$56,000		$50,000		$36,000		$30,000	
Middle 50% Range	33,000-54,000		a		40,000-60,000		30,000-45,000		a	

[1] See Chart 1 for definition of organizational levels.

[2] Excludes 4 plans for which information was not obtained.

[a] Too few for calculation.

to be smaller the farther down into the organization the plan goes. As Table 1 indicates, the median salary of the lowest-paid recipients for those plans that cover only the very top executives is $56,000, compared with $30,000 for plans that reach first-line supervisors. Plans that go no lower than key managers or middle management fall between these two extremes; $50,000 and $36,000, respectively, are the median salaries of the lowest-paid option recipients.

Among the plans that cover only key managers or reach into middle management, the lowest-paid optionee in large companies tends to be paid more than a counterpart in smaller companies.

- For example, among manufacturers with plans that cover only key managers (and top executives), the median in 15 companies with sales of $5 billion or more is $67,000, compared with $51,000 in 24 companies with sales in the $1 to $5-billion range and $41,000 in 19 companies with sales under $1 billion.
- Among manufacturers with plans that cover middle managers, the median salary of the lowest-paid option recipient is $50,000 in 13 companies with sales of $5 billion or more; $40,000 in 24 companies with sales of $1 billion to $5 billion; and $30,000 in 27 companies with sales under $1 billion.

To some extent, these differences reflect the fact that larger companies pay more than smaller companies; at the same time, they suggest that larger companies are relatively more restrictive in their definition of a key manager and of middle management.

Number of Participants

The actual number of executives that are likely to be granted incentive stock options under the plans studied here vary widely. Taking all plans together, however, the median plan provides options for 146 executives, with the middle half covering 74 to 358 participants. As Table 2 shows, the number of participants varies according to the lowest organizational level reached. The median number of executives who participate in plans that cover only top management is 30. The median increases to 100 executives in plans that cover key managers (and top executives). The median number of executives in plans that cover middle management or reach first-line supervisors is 225.

Among the plans that cover only key managers (and top executives) and among the plans that reach into middle management, the number of participants increases with company size.

- For example, among manufacturers with plans that cover only key managers, the median number of participants is 400 among 14 companies with $5 billion or more in sales, compared with 107 participants in 22 companies with sales of $1 billion to $5 billion, and only 63 participants in 19 companies with sales under $1 billion.

Table 2: Number of Participants, by Plan Coverage

Number of Participants	Total Plans		Plans According to Lowest Organizational Level Reached[1]							
			Top Management		Key Managers		Middle Management		First-line Supervisors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
1,000 or over	12	6%	—	—	—	—	9	11%	3	19%
700-999	9	5	—	—	5	6	4	5	—	—
500-699	12	6	—	—	3	4	8	10	1	6
400-499	9	5	—	—	3	4	5	6	1	6
300-399	12	6	—	—	1	1	9	11	2	13
250-299	8	4	—	—	5	6	3	4	—	—
200-249	18	10	—	—	7	9	7	9	4	25
150-199	11	6	—	—	5	6	4	5	2	13
100-149	30	16	—	—	12	15	18	24	—	—
50-99	36	20	4	33	21	26	8	10	3	19
Less than 50	30	16	8	67	18	23	4	5	—	—
Total[2]	187	100%	12	100%	80	100%	79	100%	16	100%[b]
Median Participants	146		30		100		225		225	
Middle 50% Range	74-358		a		50-210		115-500		a	

[1] See Chart 1 for definition of organizational levels.

[2] Excludes 2 plans for which information was not obtained.

[a] Too few for calculation.

[b] Details do not add to 100 because of rounding.

• Among manufacturers with plans that reach into middle management, the median number of participants in 13 companies with sales of $5 billion or more is almost 700, compared with 375 in 24 companies with sales of $1 to $5 billion, and a median of 132 participants in 32 companies with sales under $1 billion.

As a rule, incentive stock option plans are limited to selected *exempt* employees. Therefore, a more meaningful measure of plan coverage is the number of participants as a percentage of the exempt population. As Table 3 illustrates, the median proportion of exempt employees in all plans is 5.4 percent, with the middle half of the plans covering 2.5 percent to 10 percent of the exempt population. The percentage covered increases significantly the farther down the plan reaches.

Plans that cover only top executives include 1.2 percent of exempt employees, compared with a median of 3.8 percent for plans that cover key managers (and top executives). For plans that cover some middle managers, the median is 8.2 percent of the exempt population; and, for plans that reach first-line supervisors, participants average 15 percent of the exempt employees.

Although the *number* of participants increases as company size increases, the percentage of exempt employees covered tends to *decrease* with increased company size. This is shown below for manufacturers with plans that cover only key managers (and top executives) and those that reach into middle management. (The number of plans on which the median is based is shown in parentheses.)

Total Exempt Employees	Median Percentage of Exempt Employees in Plan	
	Key-Manager Plans	Middle-Management Plans
10,000 and over	1.5% (20)	4.5% (19)
3,000-9,999	2.7 (21)	6.5 (23)
1,000-2,999	5.7 (22)	9.0 (21)
Less than 1,000	7.4 (17)	18.0 (13)

The Size of the Individual Option

Although any number of individual considerations may be reflected in the size of the option granted to a specific executive, position in the management hierarchy and its correlate, salary, generally serve as a basic framework within which the size of individual grants are determined. To get a measure of the size of options, companies were asked to indicate the "value" of the most recent grant to the highest-paid, lowest-paid, and average-paid participants. The "value" of the grant is the product of the market value of a share at the time of grant and the number of shares granted.

In addition to salary, two other factors might influence the size of grants: the term of the option and, more important, the frequency of grants. As the tabulation below indicates, most of the companies grant options every

Table 3: Percentage of Exempt Employees Likely to Receive Options, by Plan Coverage

Number of Participants as Percent of Exempt Employees	Total Plans		Plans According to Lowest Organizational Level Reached[1]							
			Top Management		Key Managers		Middle Management		First-line Supervisors	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	Number	Percent
40-45%	2	1%	—	—	—	—	1	1%	1	6%
30-39	6	3	—	—	3	4%	2	3	1	6
20-29	11	6	—	—	1	1	8	10	2	13
15-19	12	6	—	—	1	1	6	9	5	31
10-14.9	22	12	—	—	3	4	17	22	2	13
9-9.9	2	1	—	—	1	1	1	1	—	—
8-8.9	10	5	—	—	3	4	5	6	2	13
7-7.9	7	4	—	—	4	4	3	4	—	—
6-6.9	13	7	—	—	7	9	5	6	1	6
5-5.9	16	9	2	17%	7	9	6	9	1	6
4-4.9	16	9	1	8	8	10	7	9	—	—
3-3.9	15	8	—	—	10	12	4	5	1	6
2-2.9	20	11	2	17	13	16	5	6	—	—
1-1.9	22	12	4	33	13	16	5	6	—	—
Less than 1%	12	6	3	25	7	9	2	3	—	—
Total[2]	186	100%	12	100%	81	100%	77	100%	16	100%
Median Percent	5.4%		1.2%		3.8%		8.2%		15%	
Middle 50% Range	2.5%-10%		a		2.0%-6.9%		4.3%-13.0%		a	

[1] See Chart 1 for definition of organizational levels.

[2] Excludes 3 plans for which information was not obtained.

[a] Too few for calculation.

year, whether the term of the option is ten years or something less.

Frequency of Grants	Plans, by Term of Option	
	10-Year Term	5- 6- 7- 8-Year Term
1 year	96	11
1-2 years	7	—
2 years	23	3
2-3 years	6	1
3 years	9	1
4 years	6	—
5 years	4	2
Total	151	18

The number of cases is too small to determine the influence, if any, of the length of the option term or the frequency of grants. Therefore, only data for the 96 plans with annual grants and a 10-year option term were used. For the 288 executives in these companies for whom data were obtained, the median value of the most recent option was 49 percent of base salary, with the middle half of the awards ranging from 27 percent to 87 percent of salary. As Table 4 shows, the median award of 90 percent of salary for the highest-paid participant (typically, the chief executive officer) is significantly higher than the median for the average-paid optionee (45 percent of salary), and the lowest-paid participant (30 percent of salary). A more general relationship between salary and the size of the award is illustated in Table 5.

Restrictions on Exercising the Option

The regulations governing incentive stock options require that the term of an individual option can be no longer than ten years; that is, if an executive does not purchase the stock within ten years of the date the option is granted, the option expires automatically.[6] This statutory ten-year term is used in 86 percent (162) of the 189 plans studied here; 12 percent (23) use five years, and the other four set the term at six, seven or eight years.

To encourage an option recipient to remain with the company, most plans restrict the rate at which an executive can exercise an option over the term of the option. This is done by using one or both of the following procedures:

(1) "Waiting Period"—A specified period of time following the date of grant during which the executive cannot exercise *any part* of the option.

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[6] This section is concerned with a specific, single grant. Another important restriction is that grants must be exercised in sequence (see page 3).

Table 4: Value of Option for 96 Plans with Annual Grants and 10-Year Option Term

Value of Award[1] *as Percent of Salary*	*Highest-Paid Recipient*	*Average-Paid Recipient*	*Lowest-Paid Recipient*
	Number	*Number*	*Number*
200% or more	11	—	—
150-199	8	4	—
120-149	10	1	2
110-119	8	2	1
100-109	7	6	2
90-99	4	1	2
80-89	5	2	4
70-79	2	4	2
60-69	9	11	5
50-59	7	13	9
40-49	14	10	10
30-39	3	12	16
20-29	2	18	14
Less than 20%	6	12	29
Total	96	96	96
Median Award	90%	45%	30%
Middle 50% Range	48%-136%	25%-67%	17%-50%
Median Salary	$330,000	$75,000	$48,000
Middle 50% Range	$220,000-$440,000	$62,000-$100,000	$35,000-$60,000

[1] Number of shares x market value at time of grant.

(2) "Installments"—Portions of the total option shares that are released for purchase over a specified period of time.

The various combinations of waiting period and installments are described below for plans with a ten-year option term. (Information for the twenty-three plans with a five-year option term is in the box.)

Only ten (six percent) of the 162 plans with a ten-year option term impose *neither* of these restrictions. That is, an executive can exercise all or any part of the option at any time after the date of grant.

Table 5: Value of Option by Salary, Plans with Annual Grants and 10-Year Option Term

Salary	*Median Grant (Percent of Salary)*	*Number of Executives*[1]
$400,000 and over	116%	34
200,000-399,999	81	47
100,000-199,999	58	47
75,000- 99,999	48	32
50,000- 74,999	36	66
25,000- 49,999	28	56

[1] Excludes 6 paid less than $25,000.

Restrictions in 23 Plans with Five-Year Option Term

No Restrictions—1 plan

Only Installments—1 plan
20 percent becomes exercisable each year

Only a Waiting Period—8 plans
6 plans—one year waiting period
2 plans—two year waiting period

Waiting Period plus Installments—13 plans
waiting period is one year in all.
installment provisions:

6 plans—25 percent of shares are released after one year with another 25 percent each year thereafter.

3 plans—20 percent of shares are released after one year with another 20 percent each year thereafter.

2 plans—50 percent of shares are released after one year with the other half a year later.

2 plans—One third of the shares are released after one year with another one-third each year thereafter.

Installments Only

Four plans with a ten-year option term have no waiting period, but require the option to be exercised in installments. In three of these plans, 20 percent of the shares become exercisable each year. That is, at any time during the first year from the date of grant, the recipient can exercise 20 percent of the option shares; at any time during the second year, another 20 percent is exercisable, and so on. The entire grant is exercisable, therefore, four years after the date of grant.

In the other company, 25 percent is available for purchase during each of the years following the date of grant. Thus, the entire grant is exercisable three years after the date of grant.

A Waiting Period Only

Fifty (31 percent) of the plans with a ten-year option term have a waiting period but no installment provision. These waiting periods are shown below.

Waiting Period	*Number of Plans*
6 months	7
1 year	35
1½ years	1
2 years	5
3 years	2

During a waiting period, no part of the option can be exercised, but after this all shares are available for purchase.

Waiting Period Plus Installments

The remaining 98 (60 percent) of the plans with a 10-year option term have *both* a waiting period and an installment provision. The waiting period is one year in almost all of these plans, as shown below.

Waiting Period	*Number of Plans*
6 months	2
1 year	84
1½ years	1
2 years	9
3 years	2

As would be expected, the installment provision in these plans is related to the length of the waiting period; but even among plans with the same waiting period, the installment provisions vary considerably. For example, among the plans with a ten-year option term and a one-year waiting period, about one-third (29) release 25 percent of the shares at the end of the waiting period, with another 25 percent each year thereafter (Table 6). Thus, all shares are available for purchase four years after the date of grant. In fourteen plans, all shares are not available until five years after the date of grant; 20 percent are released at the end of the waiting period and 20 percent each year thereafter. At the other extreme, 18 plans release all shares within two years of the date of grant; one-half after the one-year waiting period and one-half a year later. The variations among the 14 plans that have a waiting period other than one year are shown in Table 7.

Relation to Holding Period

Under the regulations that govern incentive stock options, there are no tax consequences when the option is granted or exercised, but the recipient is taxed at capital gains rates when the stock is sold. However, to be eligible for this tax treatment, there can be no disposition of the stock within two years of the date of grant or within one year after the exercise of the option. To meet these requirements as soon as possible after an option is granted,

Table 6: Installment Provisions, 84 Plans with One-Year Waiting Period and 10-Year Option Term

	Percent of Shares Released for Purchase Each Year from Date of Grant				
Number of Plans	*1 Year*	*2 Years*	*3 Years*	*4 Years*	*5 Years*
14	20%	20%	20%	20%	20%
29	25	25	25	25	
4	40	20	20	20	
8	33⅓	33⅓	33⅓		
4	50	25	25		
3	40	30	30		
2	30	30	40		
18	50	50			
1	66⅔	33⅓			
1	33⅓	66⅔			

Table 7: Installment Provisions by Length of Waiting Period (Fourteen Plans with Waiting Period Other than One-Year and Ten-Year Option Term)

	Percent of Shares Released for Purchase, by Months from Date of Grant										
	Number of Months										
Waiting Period	*6*	*12*	*18*	*24*	*30*	*36*	*42*	*48*	*54*	*60*	*72*
6 months											
1 plan	20%	20%		20%		20%		20%			
1 plan	25	25		25		25					
18 months											
1 plan			40%		20%		20%		20%		
2 years											
1 plan				20%		20%		20%		20%	20%
1 plan				25		25		25		25	
2 plans				50		25		25			
2 plans				33⅓		33⅓		33⅓			
1 plan				50		30		20			
1 plan				25		25		50			
1 plan				50		50					
3 years											
2 plans						50%		50%			

all option shares would have to be available for exercise within one year of the date of grant. Barely one-third (60) of the 189 incentive stock option plans have a waiting period or installment provision that allows an executive to exercise *all* shares within one year from the date of grant (52 of the 162 plans with a ten-year option term; seven of the 23 with a five-year option term; and one of the four plans with a six-, seven- or eight-year term).

In addition, the sequential exercise provisions for ISO's may make it *impossible* for options to be exercised according to the installment schedule in some plans. For example, if a company makes annual grants and, under each grant, 25 percent may be exercised in each of four annual installments, then the first installment of the *second* grant cannot be exercised until the fourth installment of the first grant is exercised. The regulations state that the sequential exercise restriction would limit the exercise of any ISO granted later until either the exercise or expiration of all installments of the ISO granted earlier.

Stock Appreciation Rights

A stock appreciation right (SAR) gives an optionee, in lieu of exercising the stock option, the right to receive from the company an amount equal to the appreciation in the stock price since the date of grant. This gain is taxed as ordinary income to the executive at the time it is received and the company gets a tax deduction.

The primary purpose of an SAR is to provide an executive with the opportunity to receive the market gain in an option without the cost of borrowing money to purchase the stock, and without the investment risk of a subsequent decline in the price of the stock. Furthermore, if the executive is an "insider," exercising the SAR cancels out the risks created by the SEC requirement that purchased option shares be held for six months before they may be sold. Also, because the exercise of the SAR cancels the underlying option right, the company has to use relatively fewer shares for the plan over time.

The regulations specifically allow a "tandem ISO-SAR"; however, the SAR must have the following characteristics:

- The SAR can expire no later than the expiration of the underlying ISO.
- The SAR payment cannot exceed the option gain at exercise.
- The SAR is transferable only when the related ISO is transferable (e.g., at death) and only under the same terms.
- The SAR is exercisable only when the related ISO is exercisable.
- The SAR may be exercised only when the related ISO is valuable. That is, the SAR may not be exercised when the ISO is under water as a device for freeing a valuable ISO granted later.

Approximately 45 percent (85) of the incentive stock option plans provide for stock appreciation rights. However, among the 29 plans that grant *only* ISO's, only 21 percent (six) provide SAR's. Similarly, among the 160 plans that grant both ISO's and nonqualified options, 21 percent (34) provide SAR's only for the nonqualified grants—not for ISO's. Almost half (49) use SAR's for both ISO's and nonqualified options; and the remaining 29 percent (47) do not use them for either.

Among 75 incentive stock option plans for which information was obtained, 30 plans provide SAR's for all who receive an option, but the other 60 percent (45 plans) grant SAR's *only* to officers and members of top management who are subject to Section 16 (b) of the Securities and Exchange Act. (This includes 12 plans that cover a somewhat broader group of top management as well.)

Under this rule, profits from a purchase and sale by these "insiders" of company stock within a "short-swing" period of less than six months can be recovered by the company. However, under SEC Rule 16b-3, *cash* received on the complete or partial settlement is not subject to this "short-swing" provision if the exercise of the SAR, and the election of the cash payment, is made during a "window period": A period that starts on the third business day and ends on the twelfth business day following the release of annual or quarterly company financial statements. In addition, the underlying stock option must have been outstanding for at least six months, and a "disinterested" committee responsible for plan administration must consent to any election for SAR payments in cash.

If stock is issued for full or partial payment of an SAR, the transaction remains subject to Section 16 (b); that is, the stock cannot be sold for six months. However, as protection against a fall in the stock price during this period, the determination of the amount of taxable income can be postponed for the six months.

The major reason for limiting SAR's to this "insider" group (or any other small group of top executives) is the cost of the SAR to the company. SAR payments are a compensation expense and, therefore, reduce reported net income and earnings per share. Because the cost is the increase in price of company stock after the date of grant of the SAR, the very grant of the SAR introduces an unknown cost that can be very large. In addition, gains in the value of the SAR must be accrued and reported during the period that SAR's are outstanding. Therefore, considerable volatility can appear in a company's income statement because the compensation expense credited or debited is based on the stock price at the beginning and end of each fiscal quarter. Furthermore, current accounting procedures assume that all SAR's will be exercised and not the underlying options; accrued SAR expense cannot be reversed even if the option is exercised. (This is treated as consideration for stock issued.)

It is possible that SAR experience under ISO's will be quite different than under nonqualified options, where the SAR usually was exercised rather than the option. First, there is no tax at the time of exercise of an ISO as there is for a nonqualified option. In addition, the possibility of capital gains tax on the bargain element of the ISO may outweigh the need to borrow money for exercise. Therefore, fewer SAR's may be exercised under ISO's, cutting the cost of SAR's appreciably.

It should be noted that two other devices for limiting the cost of SAR's are used in the incentive stock option plans studied here. Two of the eighty-five ISO's limit SAR payments to no more than 100 percent of the option price; and one to 200 percent. In another eight plans, the SAR applies to only half of the shares granted. That is, the executive must purchase half of the shares; the SAR payment is made in cash to provide the executive with funds to pay taxes on the stock gain. This procedure also is an attempt to encourage the executive to hold on to option stock. Other plans also may do this by administrative rules in which payment of the SAR is partially or entirely paid in company stock.

Stock Swaps

In September, 1980, the Internal Revenue Service in Revenue Ruling 80-244 endorsed stock-for-stock exercise (stock swaps) for *nonqualified* options. Under this arrangement, nonqualified options can be exercised with previously purchased stock, in lieu of cash, and the tax on any gain in the old stock is postponed. Thus, the executive uses pre-tax dollars to exercise the option.

For example, suppose an executive owns stock previously purchased at $10 per share, and has an option to purchase 100 shares at $20 per share when the current market value of company stock is $40 per share. To exercise the option, the executive gives the company 50 previously purchased shares with a current market value of $2,000 (50 shares X $40); in return, the executive receives all of the option shares (100 shares X $20 = $2,000). Operationally, the swap of the 50 previously owned shares for 50 of the option shares is not considered a taxable transaction, and the tax basis of $10 is retained.[7]

The value of the other 50 shares, $2,000 (50 shares X $40), represents the bargain element and is taxed as ordinary income; the tax basis is $40. If this same logic is applied to *incentive stock options*, the value of the 50 shares representing the bargain element would not be taxed until sold, and the tax basis of the stock would be zero.

Although the law specifically allows an executive to exercise an incentive stock option with previously acquired company stock, the use of this provision for ISO's has been effectively barred because the IRS has refused to rule that there will be no tax on the appreciated value of

[7] Optionees do not have to actually deliver the shares to the company; they merely attest that they own a sufficient number of shares. The company issues a certificate only for the new shares acquired, which represent the bargain element.

the old stock which is surrendered for an ISO. In addition, the IRS has questioned the "tax-free SAR" effect of not taxing the shares that represent the bargain element.

Whatever the final version of the general stock-for-stock rules, the use of a stock-for-stock variant, called "pyramiding," already has been eliminated for ISO's. "Pyramiding" is a procedure in which an executive first tenders a small number of shares and then, in a succession of stock swaps, converts this small investment into shares that represent the bargain element.

For example, suppose the executive in the illustration above had only 20 previously purchased shares, not the 50 needed to exercise the full nonqualified option. The executive could turn in the 20 shares valued at $800 (20 shares X $40) and purchase 40 option shares (40 shares X $20 = $800). To exercise the remaining 60 option shares, the executive needs $1,200 (60 shares X $20); therefore, the executive delivers 30 of 40 shares now held (30 shares X $40 = $1,200). After this last transaction, the executive has exercised his full option for 100 shares. Starting out with only 20 previously owned shares, the executive has 70 shares with a value of $2,800; 20 shares represent the initial shares and the other 50 shares represent the bargain element of the option, $2,000.

Obviously, the executive could have started the process with even fewer than 20 shares and, with a larger number of successive swaps, reached the same result. This "pyramiding" is not possible under an incentive stock option plan because ERTA was subsequently amended (effective March 15, 1982) to provide that *statutory* stock option shares tendered for ISO shares must be held the required waiting period (two years after grant, and one year after exercise in the case of ISO's) without being deemed "sold" in a disqualifying disposition.

The status of one other aspect of stock-for-stock exercise has not been entirely resolved. The net result of a stock swap is that the executive receives the same net increase in stockholdings that would have been received with an SAR settled in stock. But unlike an SAR, there is no charge to earnings. Accounting firms may require a charge in some form.

In any event, almost three-fourths (138) of the incentive stock option plans in this study provide for stock-for-stock exercise.

Number of Shares Authorized

Few (39) of the plans studied here are new plans, recently adopted to provide only incentive stock options: Only 19 companies have a new incentive stock option plan as the only plan in the company; another 20 companies have a new ISO plan but also have another, older plan for nonqualified options only. All of the other 150 companies have plans initially adopted to provide nonqualified options but modified recently to provide incentive stock options as well. (Eight of these companies have two nonqualified plans, both of which have been modified to grant ISO's, too.)

Therefore, the 213 plans for which data on the number of shares authorized are available are a mixture of plans adopted during the past ten years, including some plans that do not provide for incentive stock options. Most of the plans have a term of ten years, but thirty have a term of only five years. These five-year plans have been excluded from the analysis (as well as thirty-four of the ten-year plans for which data were not available).

As Table 8 indicates, the typical ten-year plan authorized 750,000 shares, with the middle half ranging between 300,000 shares and 1.2 million. It would be expected that the greater the number of participants in a plan, the larger the number of shares earmarked for the plan. Although the number of cases is small, the tabulation below suggests the nature of this relationship.

Number of Participants	*Number of Plans*	*Median Authorized Shares*
400 and over	31	2.1 million
200-399	30	900,000
100-199	37	725,000
50-99	33	500,000
Less than 50	18	250,000

As Table 9 indicates, the number of shares reserved for options, as a percentage of total shares outstanding, is typically 4.1 percent, with the middle half ranging from

Table 8: Number of Shares Authorized for 10-Year Plans

	10-Year Plans	
Number of Shares	*Number*	*Percent*
4 million and over	6	4%
3 million	8	5
2.1 million - 2.9 million	6	4
2 million	10	7
1.1 million - 1.9 million	14	9
1 million	15	11
900,000 - 999,000	6	4
800,000 - 899,000	5	3
700,000 - 799,000	8	5
600,000 - 699,000	8	5
500,000 - 599,000	14	9
400,000 - 499,000	8	5
300,000 - 399,000	12	8
200,000 - 299,000	19	14
100,000 - 199,000	10	7
Total	149	100%
Median	750,000 shares	
Middle 50% Range	300,000-1.2 million	

3.1 to 5.7 percent. However, this percentage decreases significantly as the total number of outstanding shares increases. The median for companies with less than 5 million shares outstanding is 6.0 percent, compared with 4.5 percent in companies with 5 to 20 million shares outstanding, and 3.5 percent in companies with 20 million or more shares outstanding.

For the most part, the shares of common stock which can be used for a stock option plan are authorized but unissued shares, either as the sole source of stock or in conjunction with treasury shares or with treasury shares and "market" shares.

As the tabulation shows, 62 percent of the plans allow authorized but unissued shares; 64 percent can use treasury shares (shares reacquired by the company but not specifically for stock option use); and 37 percent are allowed to use shares purchased in the market specifically for stock option use.

Allowed Source of Shares	*Plans*	
	Number	*Percent*
Unissued only	59	31%
Treasury only	15	8
Market only	5	3
Treasury and Market	2	1
Unissued and		
Treasury and Market	59	31
Treasury	45	24
Market	4	2
Total	189	100%

Table 9: Shares Authorized for 10-Year Plans, by Percent of Total Outstanding

Option Shares as Percent of Total Outstanding	*Total Plans*		*Plans by Total Shares Outstanding*					
			Less than 5 Million		*5-19.9 Million*		*20 Million and over*	
	Number	*Percent*	*Number*	*Percent*	*Number*	*Percent*	*Number*	*Percent*
15% and over	3	2%	3	13%				
10-14.9	9	6	4	16	5	9%		
9-9.9	2	1	—	—	2	4		
8-8.9	4	3	—	—	4	6		
7-7.9	6	4	2	8	2	4	2	3%
6-6.9	11	7	3	13	3	5	5	7
5.5-5.9	6	4	3	13	2	4	1	1
5.0-5.4	13	9	2	8	7	12	4	6
4.5-4.9	15	10	3	13	5	9	7	10
4.0-4.4	11	7	1	3	3	5	7	10
3.5-3.9	20	14	3	13	6	11	11	17
3.0-3.4	16	11			7	12	9	13
2.5-2.9	12	8			5	9	7	10
2.0-	14	9			2	4	12	19
Less than 2%	7	5			4	6	3	4
Total	149	100%	24	100%	57	100%	68	100%
Median	4.1%		6.0%		4.5%		3.5%	
Middle 50% Range	3.1-5.7		4.7-10.2		3.0-6.7		2.5-4.6	